

Attention Symbols, Warning Symbols, and Gray Boxes

You *must* be aware of safety when you install and use this system. This *User Guide* provides various procedures. If you do some of these procedures carelessly, you could *injure* or *kill* yourself or damage equipment or property. Some other procedures require special attention.



The **WARNING!** symbol means that if you are not careful,

You could *injure* or *kill* yourself, or

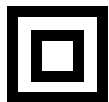
You could damage equipment or property.



The **ATTENTION!** symbol means you should pay special attention to:

Important instructions for using the system, or

Important instructions for maintaining the system.



The Class II Symbol alerts qualified service personnel to use only identical replacement parts in this apparatus.

For Your Safety



Do *not* try to open the case of the receiver. There is risk of electrical shock, which may cause damage to the receiver and/or personal injury or death to you. There are *no* user-serviceable parts inside the receiver. Opening the receiver case or making unauthorized changes will void the warranty.

To reduce the risk of fire or electric shock, do *not* expose this appliance to rain or moisture.



Important Software Notice

As with all software controlled products, unexpected behavior could arise if the user tries to perform operations in a non-routine manner. This product, like almost any other high tech product, is subject to bugs and hence EchoStar CANNOT AND DOES NOT GUARANTEE OR WARRANT THAT ALL FEATURES, SUCH AS PARENTAL CONTROL, WILL WORK AS INTENDED UNDER ALL CIRCUMSTANCES. EchoStar endeavors to improve such conditions and will periodically download improvements.

Equipment and Software Covered by this User's Guide

This *User Guide* covers DISH Player-DVR 522 and DISH Player-DVR 625 receivers and software models DP522 and DP625. This *Guide* may cover other devices not listed here.

Copyright Notice

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The information in this *User Guide* may change without notice. We may issue revisions to tell you about such changes.

Please send comments or questions about this *User Guide* to: *Technical Publications, EchoStar Technologies Corporation, 94 Inverness Terrace East, Englewood, Colorado 80112.*

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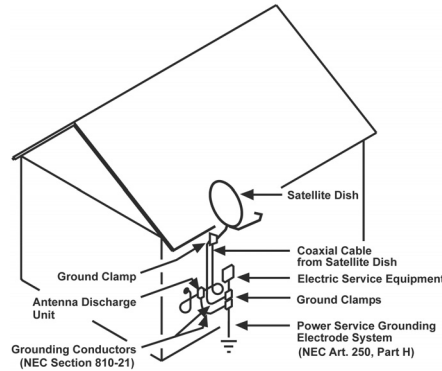
Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Use only attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Note to Satellite TV System Installer: This reminder is provided to call the satellite TV system installer's attention to Article 820-40 of the *National Electrical Code* (NEC) that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.



Safety Tips

- Unplug the receiver from the AC power outlet *before* cleaning.
- The use of accessories or attachments not recommended by the receiver manufacturer will void the *Limited Warranty*.
- Do *not* place the receiver in an enclosure such as a cabinet without proper ventilation.
- Do not install the receiver in any area where the temperature can be less than 40°F or more than 113°F.
- Do *not* stack the receiver on top of or below other electronic devices.
- Operate the receiver using *only* the type of power source indicated on the marking label. Unplug the receiver power cord by gripping the power plug, *not* the cord.
- Do *not* overload wall outlets or extension cords, as this can result in a risk of fire or electrical shock.
- *Never* insert objects of any kind into the receiver through openings, as the objects may touch dangerous voltage points or short out parts. This could cause fire or electrical shock.
- *Make sure* that the outdoor parts of the antenna system are grounded in accordance with local, state, federal, and *National Electrical Code* (NEC) requirements.
- Do *not* locate the antenna near overhead light or power circuits, or where it can fall into such power lines or circuits. When installing the antenna, take *extreme* care to avoid touching such power lines or circuits, as contact with them can be *fatal*.
- Do *not* attempt to service the receiver yourself, as opening or removing covers may expose you to dangerous voltage, and will void the *Limited Warranty*. Refer all servicing to authorized service personnel.
- Use an outlet that contains surge suppression or ground fault protection. For added protection during a lightning storm, or when the receiver is left unattended and unused for long periods of time, unplug the power cord from the wall outlet, disconnect the lines between the receiver and the antenna, and disconnect the telephone line. This will provide some protection against damage caused by lightning or power line surges.

Chapter 1

Introduction

Congratulations on choosing DISH Network. You are about to experience the excitement and convenience of Direct Broadcast Satellite (DBS) service, which delivers the very best picture and sound quality. DISH Network consistently provides state-of-the-art products and satellite-delivered services — with high performance, ease of operation, and a wide variety of entertainment options.

Welcome!

You're about to enjoy a Digital Video Recorder!

This satellite receiver lets you decide how you watch TV. You can record and play back audio and video with full digital quality. You can pause a live program and not miss any of the action or you can record a program to watch later, without a VCR.

Important Information About This Receiver

- Always handle the satellite receiver carefully. Avoid excessive shock and vibration at all times as this can damage the hard drive.
- If you have the receiver turned on and need to move it, be sure to unplug the receiver and *let it sit for at least 30 seconds* before moving it.
- Do not install the receiver in any area where the temperature can be less than 40°F or more than 113°F while the unit is operating.
- If the receiver is cold to the touch, do not plug it in immediately. Let it sit *unplugged* at room temperature for at least 45 minutes before plugging it in.
- Avoid installing the receiver on top of or underneath another electronic device (such as a stereo receiver) as this can cause heat build-up and vibration.

About this Receiver

Your DISH Network satellite receiver has features that make watching TV more exciting. Along with the DVR functions, you are about to discover new ways to make programming choices.

Dual and Single Modes

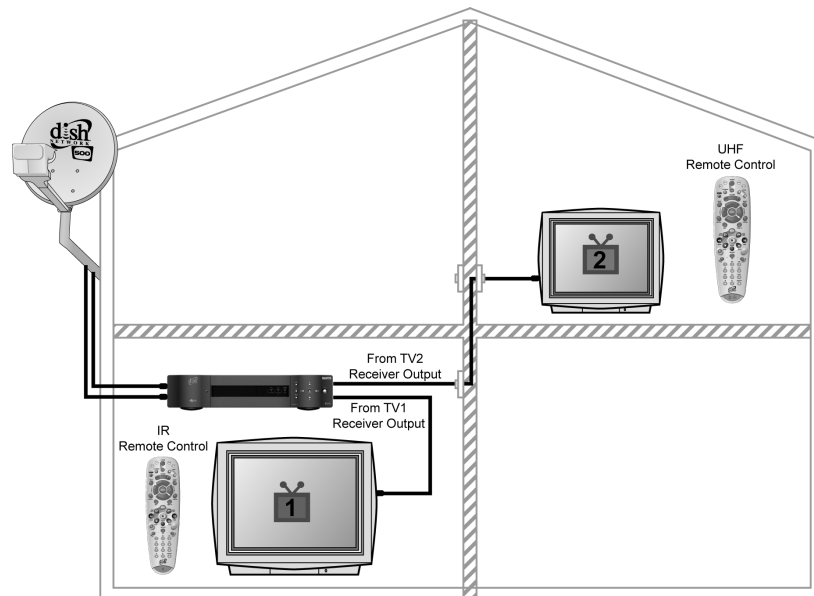
The satellite receiver can be installed and operated in one of two ways:

Dual Mode

Dual Mode uses TV1 outputs to deliver programming to the nearby TV, and TV2 outputs to deliver programming to the remote TV(s).

While in Dual Mode, you can use this two-tuner satellite receiver to watch different programs in two locations:

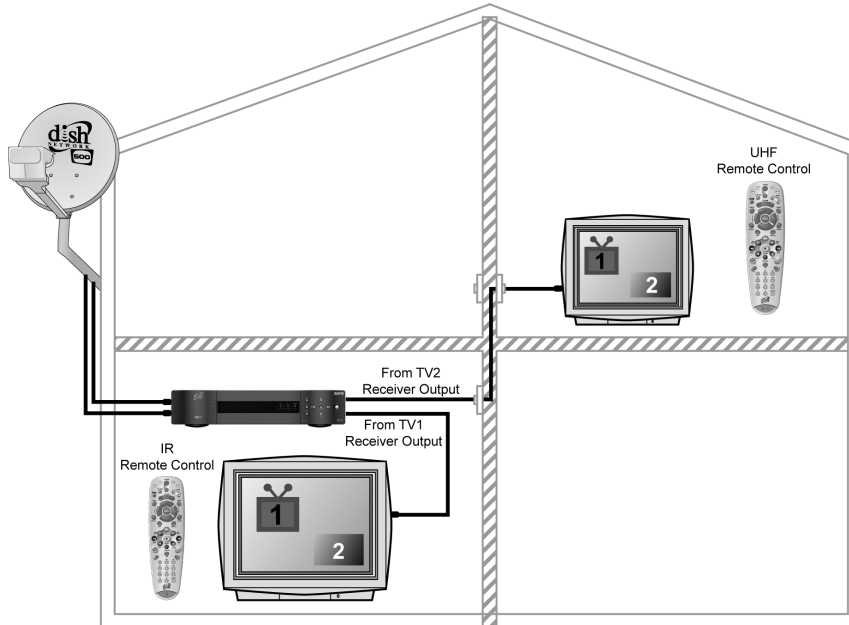
- Nearby TV - Programming from the receiver is delivered to the TV near the receiver using short audio/video cables.
- Remote TV - Programming from the receiver is delivered to a TV located in another room using existing in-home coaxial cable.



Program viewing at each TV location is independent.

Single Mode

Single Mode provides dual tuner features to a single TV like Picture-in-Picture (PIP) and the ability to watch one live program while recording another.



**Program viewing at each TV location is the same
(Shared View enabled).**

Remote Controls

Two remote controls come with your receiver:

- An Infrared (IR) remote to control programming for the nearby TV. This remote is labeled with a green number 1, which matches similar markings on the receiver output connections and the menus for the nearby TV.
- An Ultra-High Frequency Pro (UHF Pro) remote to control programming to a remote TV. This remote is labeled with blue number 2, which matches the similar markings on the receiver output connections and the menus for the remote TV.

Tip: In the margins of pages throughout this guide are tips and other information to make using your satellite receiver easier

Overview

Before you use your satellite receiver, you need to install the system or have it installed by a professional technician. For a professional installation, please call the Customer Service Center at 1-800-333-DISH (3474). If you install the system yourself, use the instructions in *Chapter 2*.



A vital part of the installation is to set up the receiver to get the latest software from the satellite signal. If you are installing a new system and follow the instructions in *Chapter 4*, your receiver will automatically get this software.

For information on the receiver and its installation, read *Chapter 2, Receiver Description and Installation* beginning on page 23.

For information on any specific feature or function, read *Chapter 3, Using The System* beginning on page 49.

For information on assembling and installing a dish antenna, read *Chapter 4, Dish Antenna Installation* beginning on page 119.

If you have a problem operating the system or receive an error message, use the *Troubleshooting Tables* beginning on page 135.

Conventions

To make it easy for you to use this guide, we use the following conventions.

- The names of remote control buttons are all uppercase.
Example: Press the **SAT** button.
- Menus and options that appear on the TV screen are in bold type.
Example: Open the **Program Guide**.
- *Select* means to move the highlight to an on-screen option or choice in a list and press the **SELECT** button on the remote control.
Example: Select the **Locks** option.
- Button sequences are shown in this convention: [button name]-[button name]-[button name].
Example: Press **MENU-6-1-3** on Remote Control 1 to display the **System Information** screen.
- Connections on the back of the receiver are in small capital letters.
Example: **SATELLITE IN**
- Where this guide mentions *nearby TV*, it refers to the TV near the receiver. The nearby TV receives TV1 menus and programming from the receiver's TV1 outputs and is connected using short audio/video cables.
- Where this guide mentions *remote TV*, it refers to the cable-ready TV(s) located in rooms away from the receiver. The remote TV receives TV2 menus and programming from the receiver's TV2 outputs through your in-home cable system.
- Where this guide mentions *remote control*, it refers to either Remote Control 1 when viewing a nearby TV or Remote Control 2 when viewing the remote TV(s). If a specific remote control must be used, this guide will refer directly to Remote Control 1 or Remote Control 2.

Fixed Images



On some TVs, the presence of fixed images for extended periods of time may cause them to be permanently imprinted on the screen. Consult your TV user guide for information on whether this is a problem for your TV, what operating/viewing restrictions apply to avoid this problem, and associated TV warranty coverage.

Moving DISH Network Logo

Whenever the receiver's outputs are turned off using the remote control or front panel **POWER** buttons, you will see the DISH Network logo moving around on your TV screen. This feature is included with your receiver to assure you that the connections between your receiver and TV(s) is not lost. Press the blank **POWER** or **SELECT** button on the remote control to resume watching satellite TV programming. Make sure you are using the correct remote (see page 26 for details).



Tip: In Dual Mode, Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

Getting Started

After your system has been installed, order and watch your programming using the following steps:

Step 1: Ordering Your Programming

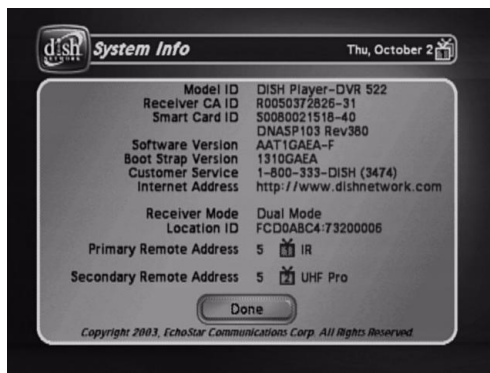
1. Using a remote control, press **SAT** and then press the blank **POWER** button to turn on the receiver. Make sure the TV is also on.
2. Press **GUIDE**.



You will see that some channels in the **Program Guide** appear in white. These channels can be viewed immediately. However, many channels will be in red. You cannot view these channels until you order programming.

3. Press the **SYSTEM INFO** button on the receiver front panel to display the **System Info** screen.

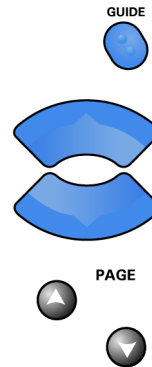
Note: The following screen is for example only. Be sure to use the numbers on the **System Info** screen displayed on your TV.



4. Call the Customer Service Center at 1-800-333-DISH (3474). A customer service representative will help you start DISH Network programming on your system and will discuss the various programming packages available.
5. Choose a package and the representative will authorize your programming.
6. Press **SELECT** to close the **System Info** screen.
7. Wait a few minutes and the channels you purchased will turn from red to white, and can now be viewed.

Step 2: Finding Programs to Watch

1. Press the **GUIDE** button.
2. When the **Program Guide** opens, use the **UP** or **DOWN ARROW** to view information on other channels. Press the **PAGE UP** and **PAGE DOWN** buttons to move you quickly through the **Program Guide**. The channels for the programming you ordered should be shown in white and are available for viewing. After you have highlighted a current program in the **Program Guide**, press **SELECT** to watch it.

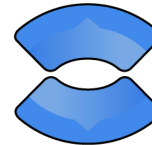


Tip: The Program Guide provides a complete listing of all programs available on all channels, including those that are not in your subscription (these channels have red backgrounds).

Quick Tour of Basic Features

This tour guides you quickly through a number of basic satellite receiver features accessible directly from the remote control without using menus. For more detailed information about each feature, see *Chapter 3, Using the System*.

1. Make sure the TV is on.
2. Press the **UP** or **DOWN ARROW** button on your remote control to change channels.
3. Press the **RECALL** button to go back to the last channel you watched.
4. Press the **THEMES (LEFT ARROW)** button to open the **Themes and Search** menu. This menu allows you to search for programming by themes (movies, sports, and more) or by key words used in the programming information.



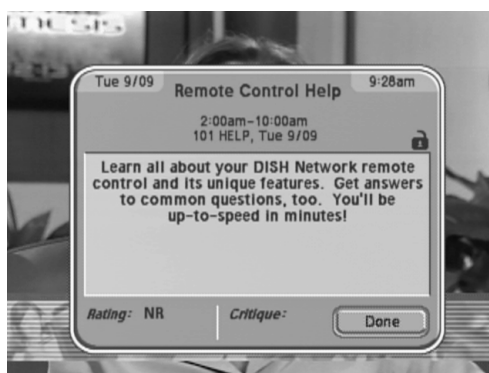


5. Select **Sports** to see a list of sporting events.
6. Press the VIEW TV button to go back to watch a program.



7. Press the INFO button to see information about the program.

Note: The first time you press the INFO button, the information screen is transparent. Press the INFO button again to make the information screen solid. When you press the INFO button a third time, the information screen closes.



8. Press the CANCEL button to go back to watch the program.

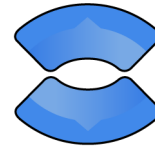


9. Press the BROWSE (RIGHT ARROW) button to open the **Browse Banner**. The **Browse Banner** shows information on a program you're watching at the top, and information on two other programs at the bottom.

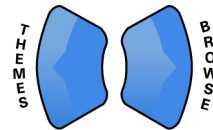




- Press the UP or DOWN ARROW button to change the channel information you see at the bottom of the TV screen.



- Press the RIGHT ARROW button to highlight the program coming on next at the bottom. Press the LEFT ARROW button to go back to the program on now.



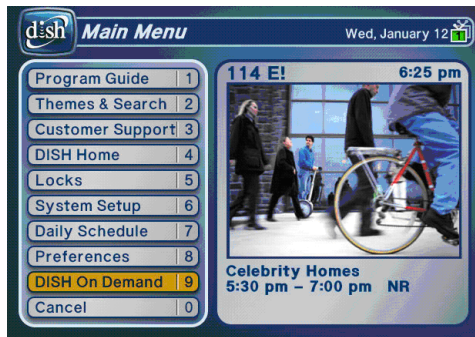
- Press the VIEW TV button to clear the **Browse Banner** from the TV screen and to go back to watching a program. Press SELECT to change to the highlighted channel.



Quick Tour of the Menus

This tour guides you quickly through the basic features available through the **Main Menu**. See *Chapter 3, Using the System* for more information about these and other features.

- Press the remote control MENU button to open the **Main Menu**.

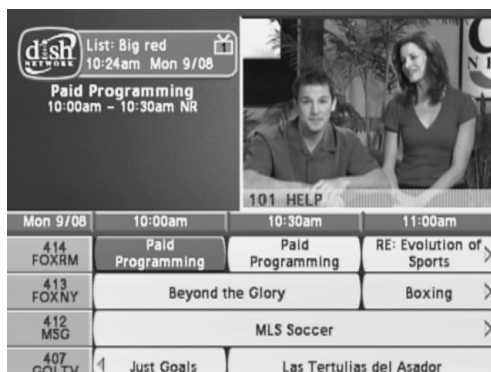


Note: DISH On Demand will be available with a future software upgrade.

Tip: In Dual Mode, Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

2. Press the 1 button to select the **Program Guide** option on the **Main Menu**. This opens the **Program Guide** on the TV screen.

1



You can use the **Program Guide** to find and select a program to watch. For now, though, go on with this tour.

3. Press the MENU button to go back to the **Main Menu**.
4. Press the 2 button to select the **Themes and Search** option on the **Main Menu**. This menu allows you to search for programming by themes (movies, sports, etc.) or by key words used in the program information.

MENU



abc

2



5. Press the MENU button to go back to the **Main Menu**.

MENU



6. Press the **3** button to select the **Customer** option. This menu provides convenient access to your DISH Network account to review your statement, pay your bill, upgrade programming, and more.

def
3



7. Press the **0** button to go back to the **Main Menu**.

0

8. Press the **4** button to select the **Dish Home** option. You can order channels, check the news and weather, and even play games.

ghi
4



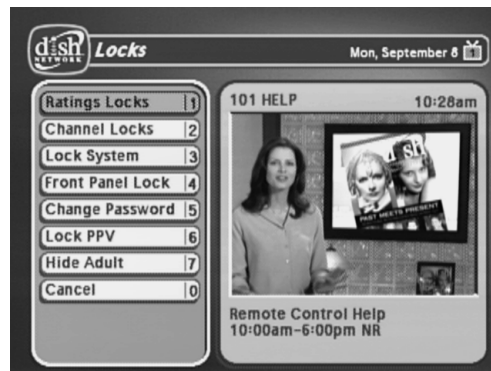
9. Press the **0** button to go back to the **Main Menu**.

0

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Introduction

10. Press the **5** button to select the **Locks** option on the **Main Menu**. This menu allows you to apply password-protected locks on programming based on rating, or even on a channel-by-channel basis.

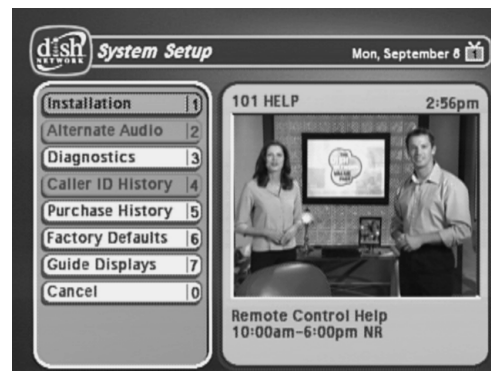


11. Press **MENU** to go back to the **Main Menu**.
12. Press the **6** button to select the **System Setup** option on the **Main Menu**. Use this menu to set up the system the way you want.

MENU



mno



13. Press **MENU** to go back to the **Main Menu**.

MENU



14. Press the 7 button to select the **Daily Schedule** option on the **Main Menu**. The **Daily Schedule** lists the timers that are planned for today, the future (up to nine days), and those that occurred in the recent past.

pqrs
7

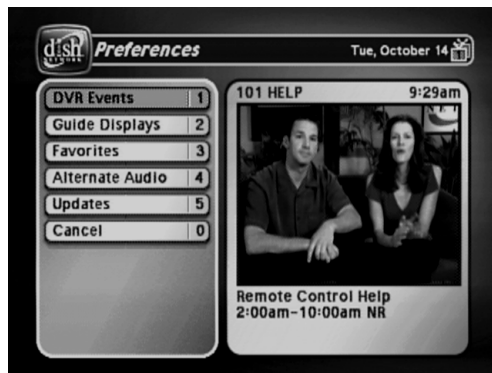


15. Press MENU to go back to the **Main Menu**.

MENU
≡

16. Press the 8 button to open the **Preferences** menu. This menu allows you to set up your receiver to make it easier to use.

tuv
8



17. Press 3 to open the **Favorites** menu. This menu lets you to set up lists of your favorite channels.

def
3



18. Press MENU to go back to the **Main Menu**.

Introduction

Tip: Press the remote control DVR button to open the DISH On Demand menu.

19. Press **9** to open the **DISH On Demand** menu. This menu lets you select a program you recorded (**My Recordings**) or a DISH On Demand program (**Movies and More**).



Note: DISH On Demand will be available with a future software upgrade.



20. Press the **VIEW TV** button to go back to watching a program.



Quick Tour of Digital Video Recorder Features

DVR features let you have fun with live TV because they put you in control. Is someone at the door or on the phone? Just press **PAUSE** on the remote. When you are ready to start watching the program again, press **PLAY**. You will start up right where you left off without missing a minute of the program. The following tour gives you an overview of the DVR features of your DISH Network satellite TV receiver. For instructions on specific functions, see *Chapter 3, Using the System*.

1. Watch a program for just a few minutes.
2. Press the **PAUSE** button to pause the program.



Tip: You can pause a live program to answer the phone or get a snack!



On some TVs, the presence of fixed images for extended periods of time may cause them to be permanently imprinted on the screen. Consult your TV user guide for information on whether this is a problem for your TV, what operating/viewing restrictions apply to avoid this problem, and associated TV warranty coverage.

Quick Tour of Digital Video Recorder Features



Note: The status bar at the bottom of your screen shows how long the program has been paused. You can pause a live program for up to two hours.

3. Press the **PLAY** button to watch the program from the point where you paused it.
4. Press the **VIEW TV** button to go back right away to the “live” program.
5. Press the **SKIP BACK** button to skip back about ten seconds in the program.



6. Press the **PAUSE** button and then press the **BACK** button to reverse the program in slow motion. Press the **BACK** button *once* to reverse the program 1/4 the speed as normal play. Press the **BACK** button *twice* to reverse at normal speed. As you press the **BACK** button repeatedly, the program reverses faster with each press up to its fastest speed.





7. Press **PLAY**.
8. Press the **SKIP FWD** button to skip ahead about 30 seconds in the play back.

Note: You cannot skip ahead if you are watching live TV.



9. Press the **PAUSE** button and then press the **FWD** button to forward the program in slow motion. When you press the **FWD** button *once* the program advances at 1/15 the speed of normal play. Press the **FWD** button *twice* to forward at 1/4 as fast as normal play. Press the **FWD** button *three times* to play the program at normal speed. As you press the **FWD** button repeatedly, the program advances faster up to its fastest speed.





10. Press the **VIEW TV** button to go back right away to the program in progress.
11. Press the **RECORD** button to start recording the program right now.
12. When the **Record Remainder of this Event** displays, select **OK** to start recording now. See page 71 for an explanation of the recording options.



13. Select **OK** to start recording the program. Notice the receiver's front panel **RECORDING** light turns on.
14. If you want, press the **STOP** button. This stops the receiver from recording the program.
Notice the receiver's front panel **RECORDING** light turns off.



15. Now, if you want to take the time, use the **Program Guide** to find another program set to start in the next few minutes.

Note: Start watching the program when it starts. Watch the program for a few minutes.

Chapter 1

Introduction

16. Press the **BACK** button to reverse the program.

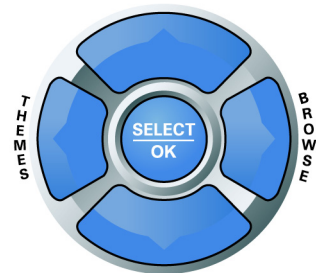
Note: Let the program reverse all the way to its start.



17. Press the **DVR** button. This opens the **DVR Events** menu on the TV screen.



18. Use the remote control arrow buttons to highlight an event on the **DVR Events** menu (it's OK to highlight an event you're recording).



19. Press the remote control **SELECT** button to select the event you highlighted. This opens a menu of info about that event.



20. Press **VIEW TV** to return to your live programming.



Quick Tour of Watching One Program While Recording Others

The steps below show one of many ways to watch one program while recording another. To tour this feature, your satellite receiver must be in **Single Mode** (see page 49) or in **Dual Mode** with **Record Plus** enabled (see page 81).

1. Press **GUIDE** to open the **Program Guide**. Find a program you want to watch now.
2. Press **SELECT** to watch that program.
3. Press the **RECORD** button.
4. With **Record Plus** enabled (see page 81) and the receiver in **Dual Mode**, select **TV2**.

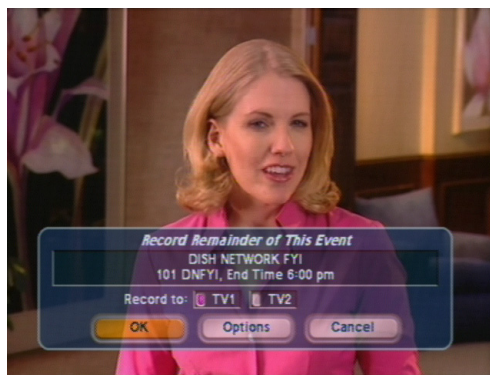
GUIDE



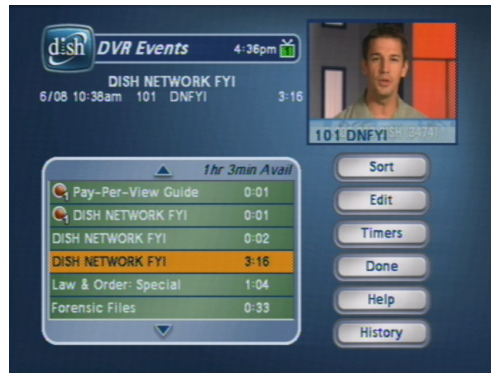
SELECT



RECORD



5. Select **OK**.
6. Press **GUIDE** on the remote. Use the **Program Guide** to find another program that you want to watch now. Select that program. You are now watching one program while recording another.
7. Press **RECORD** and select **OK** when the popup displays. You are now recording two programs at the same time.
8. Press **DVR** on the remote control. The **DVR Events** screen will open. You should see the two programs that are recording indicated by the red dot next to the listings.

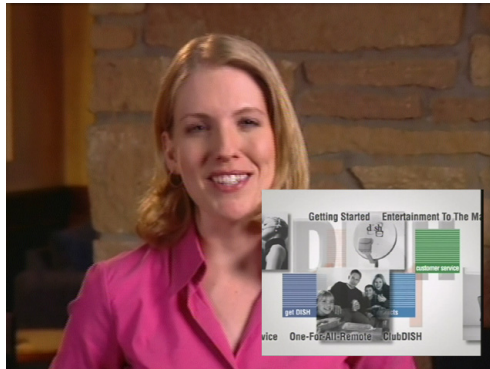


9. Select a program that you recorded in an earlier tour (one that is not recording now), then select **Start**.
10. You should now be watching a pre-recorded program while the receiver is recording the other two events (programs).

Quick Tour of Picture-in-Picture (PIP)

Your DISH Network receiver allows you to watch two different programs at the same time using Picture-in-Picture (PIP). This feature is available in **Single Mode** only (see page 52).

1. Press **PIP**. The PIP window will open. The program in the small box will be whatever is playing on the last channel you watched on **TV2** in **Dual Mode**.



2. Press **SWAP** on the remote. The channel that was in the PIP window will now be full screen.



3. Press **GUIDE** on the remote. Use the **Program Guide** to find a program that you want to watch now. Select that program.



4. This new program will be full screen.
5. Press **SWAP** to go back to watching your original program and put this new program in the PIP window.
6. Press the **PIP** button again to make the PIP window larger.
7. Press the **POSITION** button to move the PIP window around the TV screen.
8. Press the **PIP** button to close the PIP window.

Satellite Television

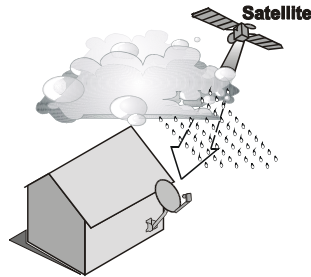
Satellite television uses satellites in a stationary orbit over the Earth to deliver television and audio programming. This type of orbit enables the satellites to stay aligned over one place on the surface of the Earth. Once the satellite dish is aimed at the satellite, the dish does not have to move to follow it.

Tip: If you lose your picture, it's most likely due to heavy rain, snow, or snow build-up on your dish.

Satellite Signal Quality

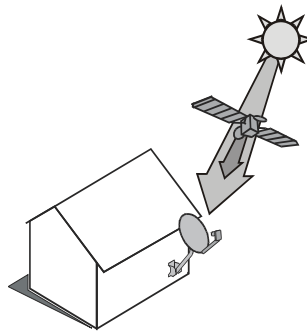
Rain and Snow Fade

Heavy rain, snow, or cloud cover can block the satellite signal, which can interrupt your programming service. By aiming the satellite dish to get the strongest signal during installation, you can help prevent rain and snow from interrupting the signal. Your service will return after the weather condition has passed.



Solar Interference

Twice a year, the sun moves to a position behind the DISH Network satellite as it orbits the Earth. The exact time of the year that this occurs varies, depending on the location, but it is near the beginning of spring and again near the beginning of autumn. The period of solar interference lasts for a few minutes at about the same time everyday for a few days during the spring and autumn, so do not be alarmed when it happens.



This is an unavoidable natural event for all television involving the use of satellites and has an adverse effect on many program providers. During these brief periods, you will not be able to see programs on DISH Network. Once the sun has moved from behind the satellite, the programs will reappear.

Chapter 2

Receiver Description and Installation

Receiver Front Panel



Smart Card Door

Behind this door is a slot for a future smart card. No smart card is included with this receiver.

Indicators

- **TV1 Power** - The green light indicates that the receiver is providing programming to the nearby TV through the **TV1** output connections.
- **TV2 Power** - The blue light indicates that the receiver is providing programming to the remote TVs through the **TV2** output connections.
- **Recording** - Indicates that the receiver is recording. **TV1** and **TV2** each have recording indicators.
- **Mode** - Indicates if the receiver is in **Single** or **Dual** mode (see page 49 for details).

Buttons

The buttons on the receiver give you some control of the receiver. Most of the time you will want to use the remote controls that came with your receiver.

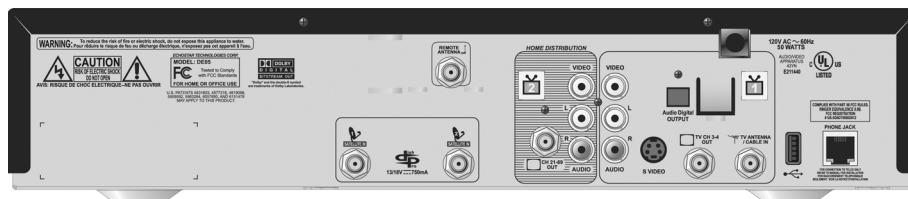
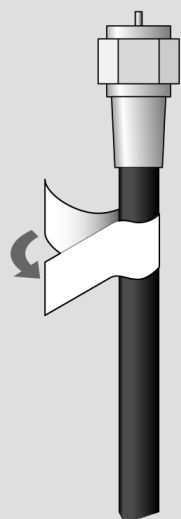
- **Mode** - Press the receiver **MODE** button to switch between **Single** and **Dual** mode (see page 49 for details).
- **System Info** - Displays the **System Info** screen on the nearby TV.
- **Menu** - Displays the **Main Menu**. After you press this button, use the **ARROWS** and **SELECT** buttons to navigate through **TV1**'s menus.
- **Arrows/Select** - Use the **ARROWS** and **SELECT** the same way as the **ARROW** and **SELECT** buttons on Remote Control 1.
- **Power** - Press the **POWER** button to turn the **TV1** programming on or off to the nearby TV.

IR Sensor

The INFRARED (IR) SENSOR receives IR signals from Remote Control 1.

Receiver Back Panel

Tip: The six coaxial connections on the back of your receiver are color coded to make the connectors easy to identify. Inside the front cover of this guide are stickers that are color coded the same way as the coaxial connections. See the installation instructions starting on page 29 for information on how to use the stickers that go on the coaxial cables.



The receiver connections on the back panel are placed in three groups:

- **TV1 Connections** - Use these connections with the nearby TV.
- **TV2 Connections** - Use these connections with the remote TV(s).
- **Other Connections** - Use these connections with the dish antenna, UHF antenna, and phone line.

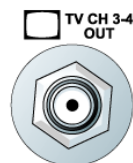


TV1 Connections

The following connections provide **TV1** menus and programming to the nearby TV.

TV CH 3–4 Out

The **TV CH 3–4** connection provides good quality video and mono (non-stereo) audio to your nearby TV. Use a coaxial cable to make the connection. The **TV CH 3–4** connection is color coded white.



RCA Out

The **RCA** audio/video outputs provide high quality picture and stereo sound to your nearby TV (if your TV has these connections). Use an RCA-type cable assembly to make the connection. If the TV has only one input for this type of audio, connect it to the right (R) phono (RCA) audio output on the receiver.



S-Video Out

The **S-VIDEO** connection provides the highest quality video available to your nearby TV (if your TV has this connection). Use an S-Video cable to make the connection. If you use this back panel output for video between your receiver and nearby TV, you must still connect the audio using the **PHONO (RCA) AUDIO LEFT/RIGHT OUTPUTS** and Phono (RCA) cables.



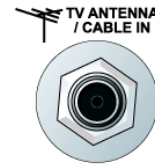
Digital Audio Out

The **DIGITAL AUDIO OUTPUT** is for use with high-quality digital sound decoding systems. Connect the **DIGITAL AUDIO OUTPUT** with a Digital Audio Optical cable (available at consumer electronics stores).



TV Antenna/Cable In

The **TV ANTENNA/CABLE IN** is used if you want the satellite receiver to connect the tuner of the nearby TV to an off-air antenna or cable TV system when the satellite receiver is turned off or when using the **TV/VIDEO** button on Remote Control 1. Use a coaxial cable to make this connection to an off-air antenna or cable TV system. The **TV ANTENNA/CABLE IN** connection is color coded black. Your nearby TV must be connected to the **CHANNEL 3-4** output to use this feature.



Tip: If you connect a cable to the **TV/Antenna In** port, attach the black cable sticker to the cable near where it attaches to the receiver. The stickers are located inside the front cover of this guide.



TV2 Connections

The following connections provide menus and programming to the remote TVs. These connections are active when the satellite receiver is in **Dual Mode** or in **Single Mode** with **Shared View** enabled.

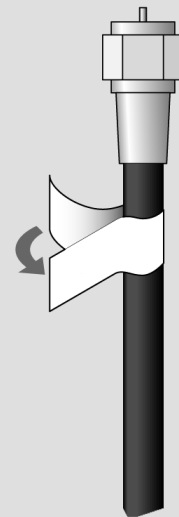
CH 21-69 Out

The **CH 21-69 OUT** connection provides good quality video and stereo audio for the remote TV(s). Use a coaxial cable to make this connection to your home cable system. Remote TVs connected to the home cable system can receive programming from this receiver output. The **CH 21-69 OUT** connection is color coded yellow.



Note: When connecting to the home distribution (**CH 21-69 OUT**) coaxial port, you must meet requirements covered under *FCC Compliance* in the *Appendix*. To meet these requirements, an in-line coaxial attenuator has been included with your receiver and may need to be installed using the following guidance:

- If connecting directly to a TV tuner port, you must install the attenuator in the cable between the **CH 21-69 OUT** port and the TV tuner.
- If connecting to your in-home cabling system to distribute the signal to a TV(s) in other rooms, in most cases you will not have to install the attenuator for typical in-home cabling systems.



Receiver Description and Installation

RCA Out

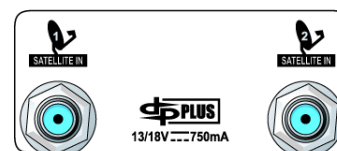
The **RCA** audio/video outputs provide high picture quality and stereo sound to your TV (if your TV has these connections). These outputs can be used to provide **TV2** menus and programming to a wireless audio/video transmitter or to a second input on a nearby TV. Use an RCA-type cable assembly to make the connection. If the TV has only one input for this type of audio, connect it to the right (R) phono (RCA) audio output on the receiver.



Other Connections

Satellite In

The **SATELLITE IN** connections are used to receive satellite TV signals from the dish antenna. The connection is made using RG-6 coaxial cable. The **SATELLITE IN** connections are color coded blue.



Note: Both **SATELLITE IN** connections must be used for proper operation of the receiver.

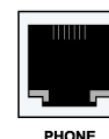
Remote Antenna

The **REMOTE ANTENNA** port receives UHF signals from the Remote Control 2 so that it can control **TV2** menus from another room. Connect the UHF antenna here, and place it so that it does not touch anything. If you do not connect the antenna, you cannot use Remote Control 2 to control the receiver for **TV2** menus and programming. The **REMOTE ANTENNA** port is color coded green.



Telephone Jack

The **TELEPHONE JACK** is used to connect the receiver to an active telephone line. Use a standard RJ-11 telephone cable assembly to make the connection. You *must* keep the receiver connected to an active telephone line. Otherwise, you may not be able to order pay per view programs, use all of the DISH Interactive features, or other services from DISH Network.



Remote Controls

The two remote controls give you easy access to all the features of your satellite receiver. You can set up each remote to control the satellite receiver and up to three other devices. These devices can be a TV, a VCR or DVD player, and a third device.

Types of Remote Controls



Remote Control 1 uses infrared (IR) light signals to:

- Control **TV 1** menus for the nearby TV in **Dual Mode**.
- Control the satellite receiver in **Single Mode**.

IR signals travel only short distances (40 feet or less), and cannot go through walls or other solid objects. You must point the remote control directly at the device, with no objects blocking the line of sight.

Remote Control 1 uses IR signals to control other devices that the remote is programmed to control. You must point the remote control directly at these devices, with no objects blocking the line of sight.

This remote control is identified by the green number 1 at the bottom of the remote control.



Remote Control 2 uses UHF Pro signals to:

- Control **TV 2** menus for the remote TVs in **Dual Mode**.
- Control the satellite receiver in **Single Mode** (with **Shared View** enabled as described on page 51).

UHF Pro signals travel long distances and go through walls and other solid objects.

To use Remote Control 2 to control the receiver, you must attach the UHF antenna to the receiver back panel (see page 28).

Remote Control 2 uses IR signals to control other devices that the remote is programmed to control. You must point the remote control directly at these devices, with no objects blocking the line of sight.

This remote control is identified by the blue number 2 at the bottom of the remote control.

Receiver Description and Installation

Batteries

The remote controls come with AAA batteries, which need to be installed when you first receive your system. When you replace old batteries, you should replace all of the batteries. Use batteries of the same kind, for example alkaline or carbon zinc, and don't mix batteries of different kinds. Alkaline batteries last longer than carbon zinc.

Installing or Changing the Batteries

1. Press down on the battery cover's top latch and slide the cover off.
2. If you are changing the batteries, take out all of the old batteries.
3. Put the new batteries in. Make sure you match the plus (“+”) ends with the plus markings on the battery case.
4. Slide the cover back into place.



Low Battery Warning

When you see a low battery warning message below the **Program Banner**, the batteries in your remote control are weak and need to be replaced.



Attach a UHF Antenna

You need to attach the UHF remote antenna to the receiver's back panel **REMOTE ANTENNA** input so you can use UHF Pro Remote Control 2.

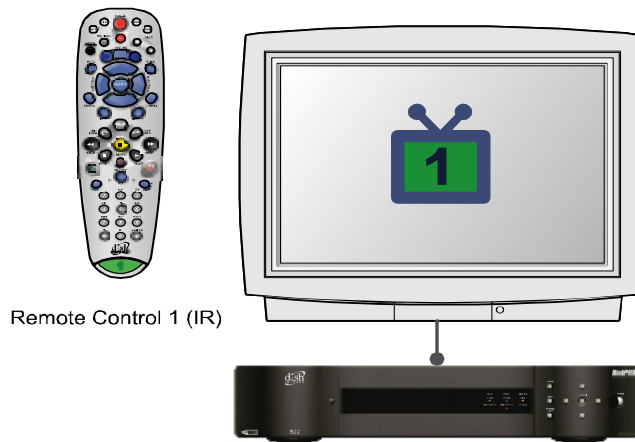


Note: Be sure to set the antenna straight up so you can use the remote control from as far away as possible. Don't let the antenna touch anything.

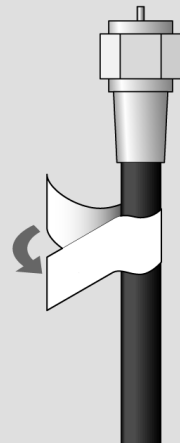
Connecting the Receiver to a Nearby TV

This section describes how to connect receiver **TV 1** output ports to a nearby TV. The easiest way to connect the receiver to the TV is using coaxial cable connections, but you may also use **RCA** or **S-Video** outputs.

Nearby TV



Tip: Using cable labels makes it easy to tell which cables connect to the receiver ports. Inside the front cover of this guide are stickers that are color coded the same way as the coaxial connections.



Coaxial Cable Connections

1. Connect a coaxial cable from the **CH 3-4** output on the receiver to the nearby TV's tuner port.
2. Place the white **CH 3-4** sticker on the cable near where the cable connects to the receiver (see the picture in the margin).
3. Plug in the power cord for the receiver.
4. Turn on the receiver with the front panel power button and make sure the green TV1 indicator is lit.
5. Turn on the nearby TV.
6. Tune the TV to channel 3.
7. You should see the **Point Dish** screen.
8. If you do not see the **Point Dish** screen, tune the TV to channel 4.

Note: If you want to change the channel that the **CH 3-4** port provides to your TV, see *Changing the TV1 and TV2 Output Channels* on page 37.

9. If desired to remind you of which TV channel (3 or 4) to tune to watch satellite programming, place one of the channel stickers (3 or 4) near or on your TV. The stickers are located in the inside front cover of this guide.



Receiver Description and Installation

RCA and S-Video Connections (TV1)

1. Connect one of the following video cables:
 - **RCA** video cable (yellow) from the receiver **TV1** outputs to the nearby TV's **RCA** video input.
 - **S-VIDEO** cable from the receiver **TV1** outputs to the nearby TV's **S-VIDEO** input.
2. Connect the **RCA** audio cables (red and white) from the receiver **TV1** outputs to the nearby TV's audio inputs. If the TV has only one input for this type of audio, connect it to the right (R) phono (RCA) audio output on the receiver.
3. Make sure your nearby TV is on and set to receive TV from the correct audio and video inputs. Refer to the instructions that came with your TV.
4. Plug in the power cord for the receiver.
5. Turn on the receiver with the front panel power button and make sure the green **TV1** indicator is lit.
6. You should see the **Point Dish** screen.

Confirm Remote Control 1 Operation

After the nearby TV has been connected to a **TV1** output using one of the methods above, do the following to confirm that the IR Remote Control 1 controls the receiver:

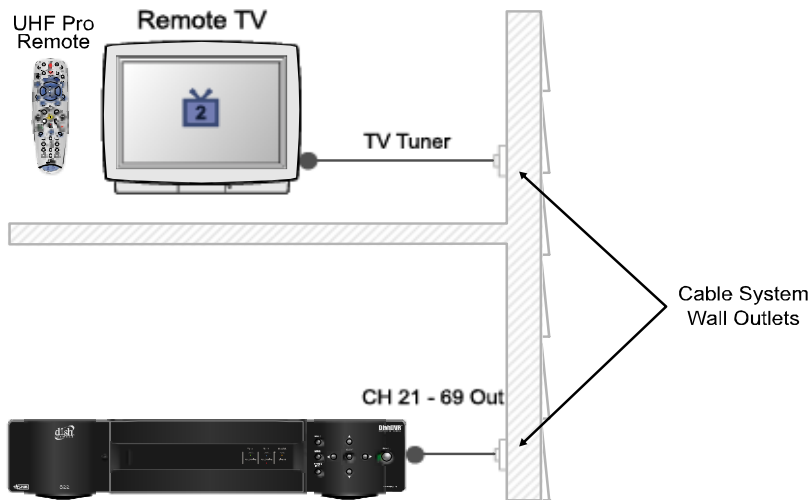
1. Make sure that fresh batteries are installed properly in the IR Remote Control 1.
2. Press the **SAT** button to put the IR Remote Control 1 in **SAT** mode to control the satellite receiver.
3. Use the Remote Control 1 arrow keys to move around the **Point Dish** screen. If you are able to move around in the **Point Dish** screen, you confirmed that Remote Control 1 is controlling the receiver.

Tip: In Dual Mode, Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

Connecting the Receiver to the TV(s) in Another Room(s)

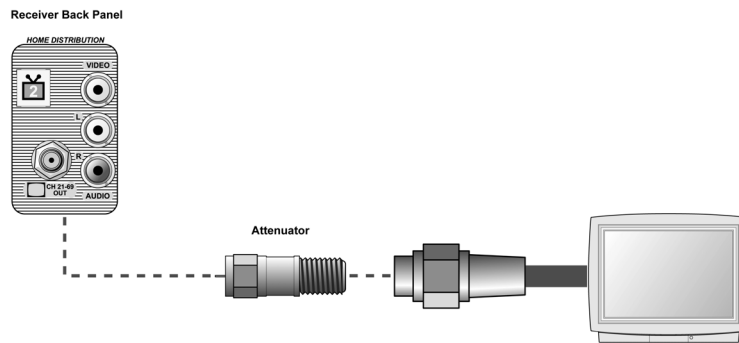
This section describes how to connect the receiver **CH 21–69 OUT** connection to the cable-ready remote TV located in another room away from the receiver. This installation uses your in-home cable system. If your house does not have built-in cabling, it will be necessary to run cables from the receiver to each remote TV. Due to the difficulty of this installation, you should consider having this professionally installed. Call DISH Network at 1-800-333-DISH (3474).

Remote TV



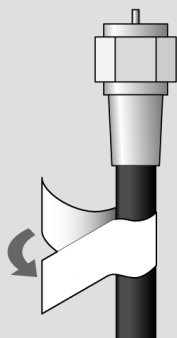
Note: When connecting to the home distribution (**CH 21–69 OUT**) coaxial port, you must meet the FCC requirements in the *Appendix*. To meet these requirements, an in-line coaxial attenuator has been included with your receiver and may need to be installed using the following guidance:

- If connecting to your in-home cabling system to distribute the signal to a TV(s) in other rooms, in most cases you will not have to install the attenuator on the **CH 21–69** port for typical in-home cabling systems.
- If connecting directly to a TV tuner port, you must install the attenuator in the cable between the **CH 21–69 OUT** port and the TV tuner.



Receiver Description and Installation

Tip: Using cable labels makes it easy to tell which cables connect to the receiver ports. Inside the front cover of this guide are stickers that are color coded the same way as the coaxial connections.



Channel: _____

Air/Cable



If you have an off-air antenna or cable connected to your in-home cable system, see *Optional - Connecting to an Off-Air Antenna or Cable* following this section.



Make sure you are familiar with how to change channels on your TV and if necessary how to switch your TV between off-air and cable channels. During this procedure, it will be necessary to change the channels on your TV(s) to tune to these channels to see the video from the receiver. See your TV user guide for instructions.

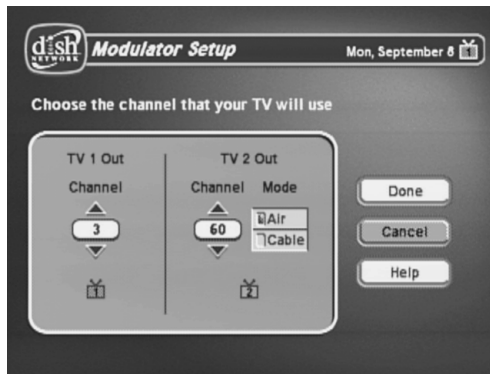
1. Connect the tuner input of the remote TV(s) in other rooms to an existing wall cable outlet using a coaxial cable.
2. Turn on every remote TV connected to the in-home cabling system.
3. Find three channels next to each other on one of your remote TVs that do not pick up any signals from off-air or cable broadcasts (they should show nothing but snow or static). These channels must fall in one of the two ranges below. For example, if you find that cable channels 75, 76, and 77 do not pickup any broadcasts, pick these channels since they fall into the range below for cable channels. Make sure these three channels on other remote TVs also do not pick up broadcasts.
 - **Air Mode** - Select a channel between 21 and 69 if your TV(s) will be set in Air Mode.
 - **Cable Mode** - Select a channel between 73 and 125 if your TV(s) will be set in Cable Mode.

Note: The remote TV(s) will have to be set to the same channel mode, either off-air or cable channel mode for this installation. See your TV user's guide for instructions on how to set your TV to off-air or cable channel modes.

4. Pick the channel in the middle of the three you selected in step 3. Write that channel down in the blank provided in the margin by step 5. For example, if the three channels you picked in the preceding step were air channels 60, 61, and 62, pick channel 61 and write it in space provided in the margin by step 5.
5. If your TV is in off-air mode for the channels you picked in step 4, circle "Air" in the margin. If your TV is in cable mode for the channels you picked in step 4, circle "Cable" in the margin.
6. Set all of your remote TV(s) to the channel mode (Air or Cable) you circled in step 5.
7. Tune all of your remote TV(s) to the channel you wrote in step 5. This is the channel you will use to receive your satellite programming.

Connecting the Receiver to the TV(s) in Another Room(s)

8. Connect **CH 21-69 Out** on the receiver to your existing wall cable outlet using a coaxial cable.
Note: If you do not have an existing in-home cable system, you will need to run coaxial cable to each TV in other rooms. If this is too difficult, you may want to contact a professional to do this installation.
9. Place the yellow sticker on the **CH 21-69 Out** cable near where the cable attaches to the receiver. The stickers are located inside the front cover of this guide.
10. Turn on the nearby TV (the TV that gets programming from the **TV1** outputs).
11. Make sure the receiver's green **TV1** indicator is on.
12. Select the **Modulator Setup** (MENU 6-1-5).

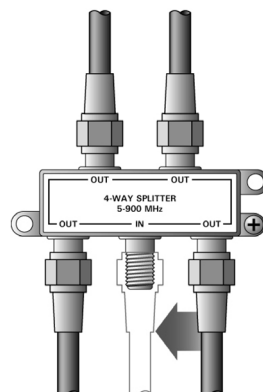


- With the **Modulator Setup** screen displayed on the nearby TV, use Remote Control 1 to do the following:
- a. Under **TV2 Out**, select either **Air** (for off-air channel numbers) or **Cable** (for cable channel numbers) based on what you wrote down in step 5.
 - b. Under **TV2 Out**, use the **UP** and **DOWN ARROWS** to change the modulator channel to the one you wrote in step 5.
 - c. Select **Done**.
14. For some TVs, you must run a channel scan so that the TVs will find and display the selected channel from the receiver. Run channel scan on all remote TV(s), if available. See your TV user's guide for instructions.
 15. Confirm that you see a picture from the receiver TV2 output on your remote TV(s).
 - If your picture looks good, go to step 23.
 - If your TV(s) do not have a picture or if it is not as clear as you would like it to be, go to the next step.

Receiver Description and Installation

16. You may need to change the cable connection on the splitter that sends the TV signal throughout your house. The change that needs to be made is move the cable coming from the receiver **CH 21-69 Out** from the output of the splitter to the input of the splitter using the instructions that follow.

The following figure shows an example of what your splitter may look like. Your splitter may look different. The places where the splitter indicates **Out** refers to all TVs connected to your cable system. The places where the splitter indicates **In** refers to where the TV signal is fed into the splitter.



1 Input, 4 Output (4-Way) Splitter

17. Find where the TV signal is distributed throughout your house. It should be near where the cable TV service enters the house.
18. Disconnect the cable TV service cable or antenna cable from the splitter input, if necessary. Make sure the disconnected cable is capped or otherwise protected from the weather.
19. Disconnect the cable coming from the receiver CH 21–69 Out port from the splitter. If you do not know which cable this is, go to the next step. Otherwise, go to step 21.
20. If you have multiple TVs on the cable system, do the following to determine which cable on the splitter is coming from the receiver:
 - If you have at least some picture on your TV(s), turn on all remote TVs connected to the cable system. Disconnect and reconnect each cable one by one observing what happens to the TV(s). When all remote TVs lose the signal, you have disconnected the receiver's cable. If only some or one TV loses the signal, then you have disconnected a cable from the TV(s).
 - If the above step does not work, disconnect one of the output cables and connect to the splitter input. If you do not see a picture, connect the cable back to its output. Repeat this step on every connection until you get a picture on the remote TV(s).
21. Reconnect the receiver's cable to the input of the splitter.
22. Make sure you have a good picture on your remote TV(s).

Connecting the Receiver to the TV(s) in Another Room(s)

23. If desired to remind you of which TV channel your satellite programming is on, write the channel number you wrote in step 4 on a blank channel sticker and place it on or near your remote TV(s). The stickers are inside the front cover of this guide.
24. Confirm Remote Control 2 controls the receiver. See the next section for instructions.
25. Program Remote Control 2's RECOVER to the channel you selected in step 5. See page 36 for instructions.

Confirming Remote Control 2 Operation

After the remote TV(s) have been connected to the **CH 21–69 OUT** using in-home cabling using the proceeding steps, do the following to make sure Remote Control 2 controls the receiver:

1. Press the **SAT** button to put Remote Control 2 in **SAT** mode to control the satellite receiver.
2. From a remote TV, use the Remote Control 2 arrow keys to move around the **Point Dish** screen. If you are able to move around in the **Point Dish** screen, you confirmed that Remote Control 2 is controlling the receiver.

Programming the Recover Button for a Remote TV

Now that the channel for the **CH 21–69 OUT** to the remote TV(s) has been set, the **RECOVER** button can be programmed to tune your TV back to this channel.

1. Program Remote Control 2 to control your TV using the instructions in *Control Other Devices with the Remote Controls* on page 106.
2. Press and hold the **TV** mode button until all the other mode buttons light up, and then let go of the button. The **TV** mode button flashes.
3. Press the **STAR (*)** button.
4. Enter the three digits of your channel number. For example, if your remote TV is set to channel 60, enter 0-6-0.
5. Press the **POUND (#)** button. The **TV** mode button flashes three times.



Tip: In Dual Mode, Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

Programming the Recover Button

Your remote controls come equipped with a RECOVER button that helps you if you accidentally change the channel or video input on your remote TV and cannot get the picture back from your satellite receiver. When you press the RECOVER button as described on page 56, the remote control sends commands to your remote TV to change channels or video inputs to try to get you back to watching satellite programming.

When your Remote Control 2 is shipped from the factory, the RECOVER button is set up to restore satellite TV viewing by tuning your TV to channel 3, 4, and other inputs (see page 56 for details). However, to use the RECOVER button with your remote TV, you need to program the RECOVER button with the specific channel (for example, channel 60) that you use to watch **TV2** programming. The following instructions describe how to program the RECOVER button to tune your remote TV back to a selected channel.

Programming the Recover Button Channel

1. Program Remote Control 2 to control your remote TV using the instructions in *Control Other Devices with the Remote Controls* on page 106.
2. Press and hold the TV mode button until all the other mode buttons light up, and then let go of the button. The TV mode button flashes. 
3. Press the STAR (*) button. 
4. Enter the three digits of your channel number. For example, if your remote TV is set to channel 60, enter 0-6-0.
5. Press the POUND (#) button. The TV mode button flashes three times. 

Removing the Recover Button Channel Programming

The following instructions describe how to reset the RECOVER button to the way it was delivered to you from the factory.

1. Press and hold the TV mode button until all the other mode buttons light up, and then let go of the button. The TV mode button flashes. 
2. Press the STAR (*) button. 
3. Press 0-0-0. 
4. Press the POUND (#) button. The TV mode button flashes three times. 

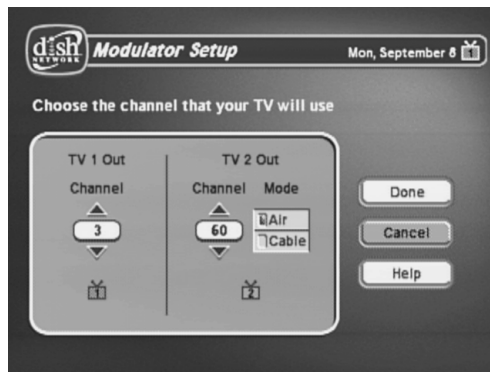
Changing the TV1 and TV2 Output Channels

The receiver comes preset to use channel 3 for **TV1** and off-air channel 60 for **TV2**. If you are experiencing interference on the channels you are using, follow these instructions to change the channel that **TV1** or **TV2** uses.



Make sure you are familiar with how to change channels on your TV and if necessary how to switch your TV between off-air and cable channels. When you change these receiver output channels, you must also change the channels on your TV(s) to tune to these channels to see the video from the receiver. See your TV user guide for instructions.

1. Press MENU-6-1-5 to open the **Modulator Setup** screen.



2. For **TV 1 Out**, highlight the number under **TV 1 Out**. For **TV 2 Out**, skip to step 4.
3. Use the UP and DOWN ARROW buttons to change the modulator channel either **3** or **4**. Continue to the next step to set **TV 2 Out** or skip to step 7 if you are finished making changes.
4. For **TV 2 Out**, select either **Air** (for off-air channel numbers) or **Cable** (for cable channel numbers).
5. Highlight the number under **TV 2 Out**.
6. Use the UP and DOWN ARROW buttons to change the modulator channel to one of the following:
 - **Air Mode** - Select a channel between **21** and **69**.
 - **Cable Mode** - Select a channel between **73** and **125**.
7. Select **Done** to save the changes.
8. Change the channel on your TV(s) to match the channel(s) you selected.
9. If desired to remind you of which TV channel to tune to get satellite programming, place a channel sticker near or on your TV to indicate the correct channel.
10. If you changed your **TV 2 Out** channel, repeat *Programming the Recover Button for a Remote TV* on page 35.

Tip: It's easier to set the output channel from the opposite TV. For example, if you are changing the output on TV1 (nearby TV), use TV2 (remote TV) to make the change. When you save the changes, simply remember to change the channel on the nearby TV.

Tip: The channel stickers are located inside the front cover of this guide.

Connecting the Receiver to the Phone Line

Keep the receiver connected to an active telephone line so you can order Pay-Per-View programs and use all of the **dish home Interactive TV** features, and other services from DISH Network.

Note: You *may* be able to use a wireless modem jack. However, this may *not* support all the features of this receiver, such as Caller ID. See www.dishnetwork.com for compatible modem products.

Note: If you have a Digital Subscriber Line (DSL), you may have to install a DSL filter between the receiver's back panel **PHONE JACK** and the telephone wall jack to successfully connect with DISH Network. You can obtain a filter from your DSL provider.

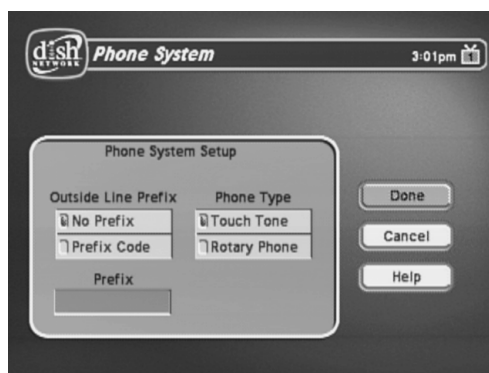
Phone Line Connection

Run a telephone cable with a standard RJ-11 connector from the receiver's back panel **Phone Jack** to an active telephone connection.

Phone System Setup

You must also set up the receiver for your telephone system (touch tone or rotary), and set a telephone number prefix, if you need a prefix to make an outside call.

1. Display the **Phone System** screen by pressing MENU-6-1-4.



2. Select the **Touch Tone** or the **Rotary/Pulse** option in the **Phone Type** list.
3. Select either the **No Prefix** or the **Prefix Code** option in the **Outside Line Prefix** list.

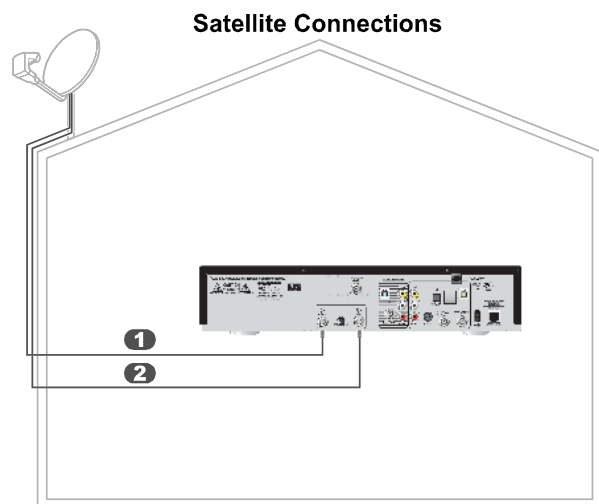
Note: The **Outside Line Prefix** is usually used only for business installations. For most residential installations, all you need set is the **Phone Type**.

4. If you selected the **No Prefix** option, select **Save** to finish.
5. If you selected the **Outside Line Prefix** option, the receiver highlights the box where you must enter the exact sequence you dial the phone to obtain an outside line.
6. Select **Save** to save the settings.

Connecting the Receiver to a Dish Antenna System

Note: Before you can begin connecting your receiver to your dish antenna, you must first complete the preceding sections on connecting your TVs to the receiver. Then if you are installing a dish antenna system for the first time, see *Chapter 4 - Dish Antenna Installation*. Otherwise, if you already have a dish antenna system installed and peaked for maximum signal strength, complete the following instructions to connect the dish antenna system to the receiver.

Note: You will need two available receiver connection ports on your installed switch or LNB to complete this installation. If these ports are not available, you may need to upgrade your system with different or additional equipment. See *DISH Pro Wiring Diagrams* in *Chapter 4*.



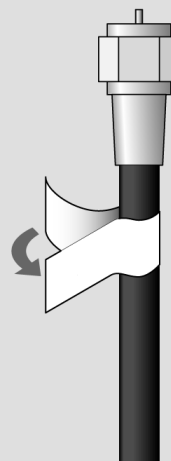
1. Connect two RG-6 coaxial cables between the **SATELLITE IN 1** and **SATELLITE IN 2** ports on the receiver's back panel to two available ports on either your switch or your LNB in your existing system. See the wiring diagrams in *Chapter 4* for appropriate receiver connections in your system.

Note: If you are installing your receiver into a system with DISH Pro LNBs (and/or switches), you can have as much as 200 feet of cable between the LNB and the receiver. However, you must use only "RG-6 coaxial cables rated for 950 to 2150 MHz. Some cables may say "Swept tested for 2150 MHz." If you have any doubt about this, ask your DISH retailer, or look on the container the cable came in. Do not use cable company TV cables or cables from other satellite TV systems not rated for 950-2150 MHz. These other cables may cause signal loss. Do not use existing cables such as RG-59. Use waterproof F-connectors outdoors.

Note: Some receivers include a DISH Pro Plus Separator that can be used when installing the receiver with a single cable along with a DISH Pro Plus Switch or LNB.

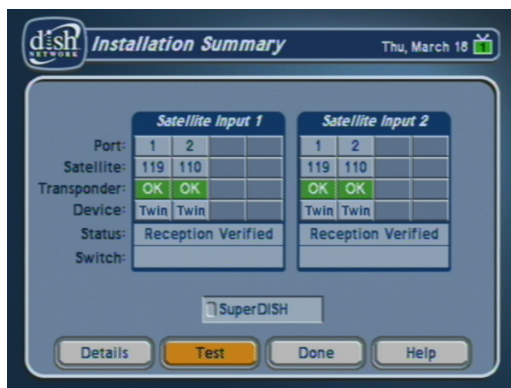
2. Peel off the blue stickers and affix them to the cables close to where they connect to the **SATELLITE IN 1** and **SATELLITE IN 2** connections on the back of the receiver.

Tip: Using cable labels makes it easy to tell which cables connect to the receiver ports. Inside the front cover of this guide are stickers that are color coded the same way as the coaxial connections.



Receiver Description and Installation

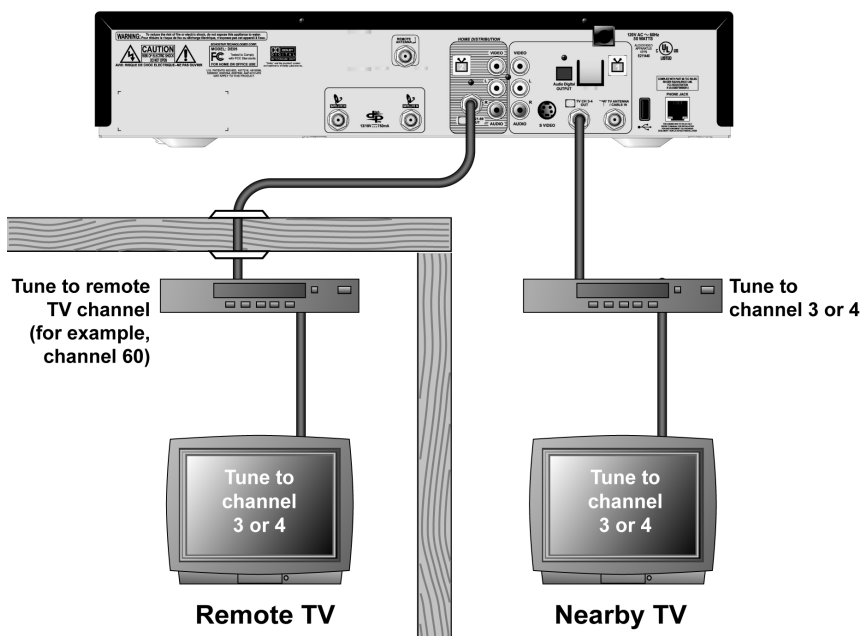
3. On Remote Control 1, press MENU-6-1-1 to display the **Point Dish/Signal** screen on the nearby TV.
4. Select **Check Switch**. When an attention screen displays, select **Retest**.
5. The receiver begins performing the **Check Switch** tests. When it is finished, the **Installation Summary** screen displays.



6. Make sure that the information on the **Installation Summary** screen identifies your system correctly and shows all transponders for all satellites in your system. Your screen may look different from the example above depending on the dish antenna system you are using.
7. Select **OK** to go to the **Point Dish/Signal** screen.
8. Select **Cancel** to exit the **Point Dish** menu. An **Attention** screen will open asking the mounting and positioning of your dish is complete with a **Locked** indication in the **Point Dish** screen. If the answer is yes, select **Yes**.
9. After you select **Yes**, the receiver will begin taking a software upgrade. You will see a **Warning** that **Vital program information will now be downloaded into your receiver**. You will also see a status bar showing the progress of this upgrade.
10. Once the software upgrade is complete, you will see a message that your receiver's memory is being upgraded.
11. Do not disturb the receiver while the receiver's memory is being upgraded.
Note: If you are installing other DISH Pro or DISH Pro Plus receivers, be sure to run **Check Switch** on all of them, and allow them to take the necessary software upgrade.
12. When the memory upgrade is complete, you should be watching TV. Your dish antenna installation is now complete.

Optional - Connecting VCRs to the System

The diagram below provide example of how to connect VCRs to your satellite TV system. Your installation may be different.



Connecting a VCR to the Nearby TV

1. Connect a coaxial cable from the **CH 3-4 OUT** output on the receiver to the nearby VCR's tuner port.
2. Connect a coaxial cable from the output on the VCR to the nearby TV's tuner port.
3. Plug in and turn on the nearby VCR and TV.
4. Set the VCR output to Channel 3 or 4 as set on page 37.
5. Tune the nearby VCR and TV to Channel 3 or 4 as set on page 37.
6. Place a **TV1** channel sticker (Channel 3 or 4 as set in step 5) on or near your nearby TV. This sticker will remind you which channel to use to watch satellite programming. The stickers are located in the inside front cover of this guide.



Receiver Description and Installation

Connecting a VCR to the Remote TV



For this installation, always leave your VCR powered on so that the TV can receive satellite programming. If you turn off your VCR, your TV will not be tuned to the correct channel to receive satellite programming.

1. Connect the tuner input of the remote VCR to an existing wall cable outlet using a coaxial cable.
2. Connect a coaxial cable from the output on the VCR to the remote TV's tuner port.
3. Plug in and turn on the remote VCR and TV.
4. Tune the remote VCR to the remote TV channel that you use to watch satellite TV programming (for example, channel 60) as set on page 33.
5. Write the channel number you tuned your VCR to in the previous step on one of the **TV2** channel stickers. Place the sticker on or near the VCR. This sticker will remind you which channel to use to watch satellite programming. The stickers are located in the inside front cover of this guide.
6. Set the VCR output to channel 3 or 4.
7. Tune the remote TV to the same channel that you set your VCR to in step 6.
8. Write the channel number you tuned your TV to in the previous step on one of the **TV2** channel stickers. Place the sticker on or near the TV. This sticker will remind you which channel to use to watch satellite programming. The stickers are located in the inside front cover of this guide.



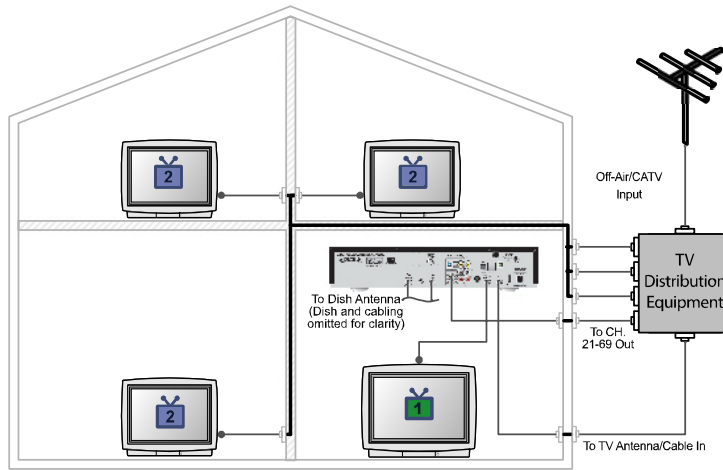
Optional - Connecting to an Off-Air Antenna or Cable

If you want to receive channels from an off-air antenna or cable in addition to your satellite receiver programming, connect the off-air antenna/cable into your TV distribution equipment.

For the nearby TV receiving programming from **CH 3–4 OUT**, the off-air antenna cable needs to be connected to the **TV ANTENNA/CABLE IN** port.

For remote TVs receiving programming from **CH 21-69 OUT**, the off-air antenna needs to be connected to your TV distribution equipment. When adding this connection, the FCC requires that you install appropriate equipment between the off-air antenna/cable and the satellite TV receiver to prevent you from accidentally retransmitting DISH Network programming (see *FCC Compliance* in the *Appendix*).

TV distribution equipment devices include coax panels, amplifiers or super home nodes, and are available through many companies. See www.dishnetwork.com for a list of approved equipment.



Optimize Your Remote Controls

Change the Address

When you receive your system, both remote controls and the receiver have been set to communicate on address 1. However, because UHF signals travel long distances and go through walls, a neighbor's UHF Pro remote could control your receiver by mistake if they are on the same address.

Note: You can also use this procedure to change the **Primary Remote Address** for IR Remote Control 1 on a nearby TV, if necessary. However, if you are using a UHF Pro remote to control **TV1**, use the instructions on page 46 to change the address.

To handle this situation, you can change address on Remote Control 2 and the receiver as follows:

1. Make sure you turn on the TV.
2. Press the front panel **SYSTEM INFO** button to display the **System Info** screen.

The **System Info** screen shows the **Secondary Remote Address**.

Write down this address: _____

3. Press and hold the **SAT** button on Remote Control 2 for about three seconds, until all of the mode buttons light up, and then let go of the **SAT** button.
4. Use the **NUMBER PAD** buttons to enter any number between 1 and 16, but not the one you wrote in step 2.

Write down the number you entered: _____

5. Press the **POUND (#)** button. If you entered the address correctly, the **SAT** mode button will flash three times.



Receiver Description and Installation

6. Press the RECORD button.
7. Make sure the **Secondary Remote Address** you see on the **System Info** screen is the same as the one you entered in step 4. If it isn't, the remote cannot control the receiver.
8. Press the SELECT button to close the **Important System Information** screen.



Checking the Remote Control Address

1. Press and hold the SAT mode button for three seconds, until all of the mode buttons light up, and then let go of the SAT button.
2. Press the POUND (#) button twice. The SAT mode button will flash the same number of times as the address number (three flashes means address 3).



Adjusting the Remote Control Antenna



Attention: If your UHF Pro Remote Control 2 isn't working very well from far away, you may be experiencing interference from objects near your receiver. To improve your remote control's range, try any or all of the following:

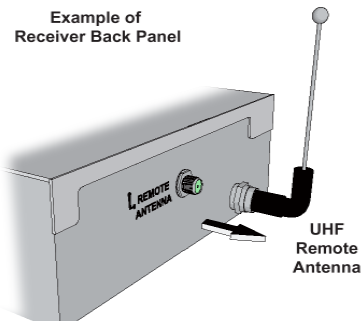
- Place the receiver higher than all of the other equipment in your entertainment center.
- Provide room above the receiver so that the antenna can be installed straight up. If this is not possible, tilt the UHF antenna at about a 30° angle.
- Place the UHF antenna outside the entertainment center by using a coaxial cable to connect the antenna to the receiver.
- Try moving the receiver to other locations.
- Move all nearby off-air antennas away from the UHF remote antenna. Do not place an off-air antenna on your receiver.
- Attach a UHF attenuator.

Attach a UHF Attenuator

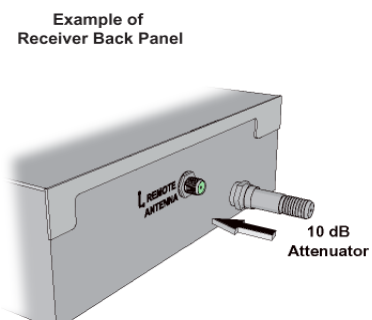
Stray UHF signals can block signals from the remote control to the receiver. To prevent this problem, you can install the attenuator provided with the satellite receiver if it is not being used for TV connections as described on page 31. Otherwise, obtain a 10 dB attenuator (you can buy one from a consumer electronics parts store).

Note: This will help keep out stray UHF signals, but also cut down how far away you can use the remote control.

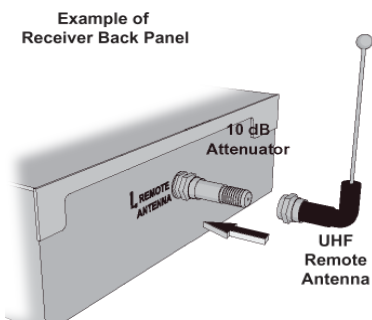
1. Take the UHF antenna off of the receiver's back panel UHF Remote Antenna input



2. Put the attenuator onto the UHF Remote Antenna input.



3. Put the UHF antenna onto the attenuator.



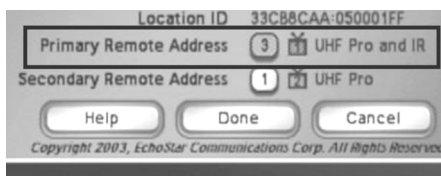
Setting Up TV1 to Operate in UHF Pro

You can set your receiver to operate your TV1 using another UHF Pro remote control (sold separately) by completing the following instructions:



If you set up your receiver to operate the  side using UHF Pro, the two UHF Pro remotes for this receiver will interfere with each other when operated at the same time. This may prevent the remotes from operating the receiver momentarily.

1. Perform the following using an existing remote control:
 - a. Open the **TV1 UHF Pro Setup** screen by pressing MENU-6-1-8 on the remote control.
 - b. Select **Enable** from the **TV1 UHF Pro Setup** screen.
 - c. Select **System Info** to open the **System Information** screen.
 - d. Move the highlight to the address for the **Primary Remote Address** as shown below. This is important - if you do not do this, your remote will change the receiver's **Secondary Remote Address** and cause your Remote Control 1 to control the  side of your receiver.



Note: Highlight the **Primary Remote Address**.

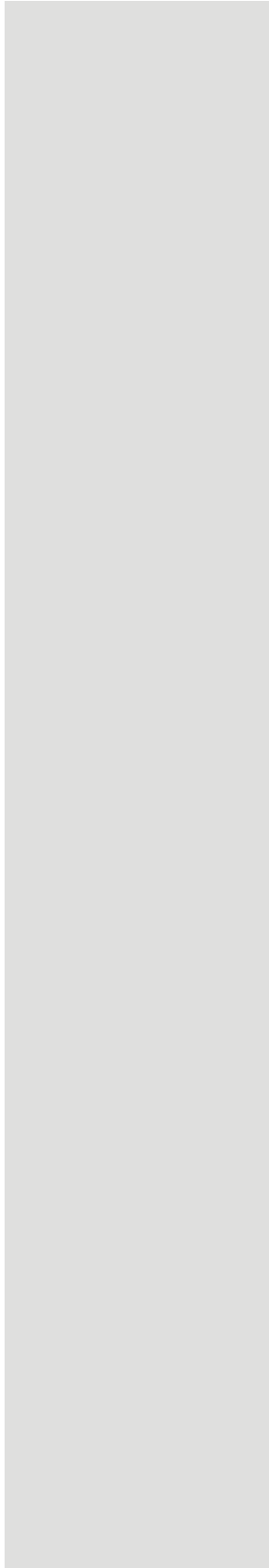
2. Perform the following using the UHF Pro remote that you are going to use to control TV1:
 - a. Press and hold the **SAT** mode button about three seconds, until all the mode buttons light up, and then let go of the **SAT** button. The **SAT** mode button will blink.
 - b. Use the **NUMBER PAD** buttons to enter any number from 1 to 16, except for the number shown by the **Secondary Remote Address**. The **SAT** mode button goes out after you enter each digit, and then lights up again.

Write down the number you entered: _____
 - c. Press the **POUND (#)** button. If you entered the address correctly, the **SAT** mode button will flash three times.
 - d. Press the **RECORD** button.
 - e. Make sure the **System Information** screen shows that the **Primary Remote Address** shows  **UHF Pro and IR** and that this address matches the number you entered in step b.

Setting Up TV1 to Operate in IR

The following instructions describe how to set up TV1 to operate in IR only.

1. Perform the following with an existing remote control:
 - a. Open the **TV1 UHF Pro Setup** screen by pressing MENU-6-1-8 on the remote control.
 - b. Select **Disable** from the **TV1 UHF Pro Setup** screen.
 - c. Select **System Info** to open the **System Information** screen.
2. Perform the following with an IR remote control, such as a Remote Control 5.0 (as shown on the back of the remote), that you intend to use to control TV1:
 - a. Press the RECORD button. The **Done** button should be highlighted.
 - b. Make sure the **System Information** screen shows that the **Primary Remote Address** shows  **IR**.



Chapter 3

Using the System

Using Dual and Single Modes

Your DISH Network satellite receiver includes features that gives you greater flexibility in how you watch TV. These features include two modes of operation: **Dual Mode** and **Single Mode**.

Dual Mode

Dual Mode uses TV1 outputs to deliver programming to the nearby TV and TV2 outputs to deliver programming to the remote TV(s). You can tell your receiver is in **Dual Mode** because the DUAL front panel indicator will light and the menu and other screens will display the following information:

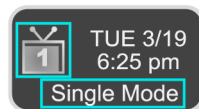


Dual Mode allows you to watch different programs in two locations:

- Nearby TV - Programming from the receiver is delivered to the TV near the receiver using short audio/video cables.
- Remote TV - Programming from the receiver is delivered to a TV located in another room using existing in-home coaxial cable.

Single Mode

Single Mode delivers the same programming to all of the TVs connected to the satellite receiver but provides dual tuner features like PIP. You can tell you are in **Single Mode** because the SINGLE front panel indicator will light and the menus and other screens will display the following information:

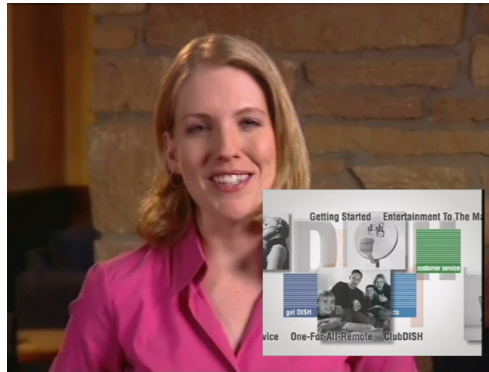


Tip: You can use the Front Panel Locks to prevent the Mode from being changed accidentally. See page 97 for instructions.

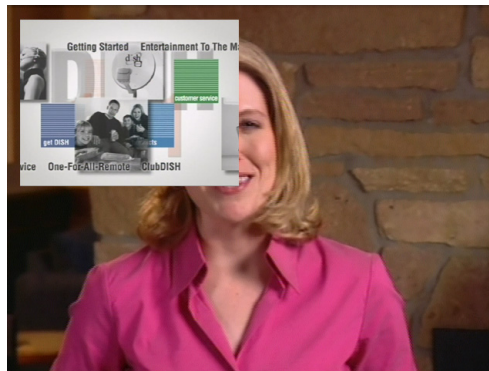
Using Picture-In-Picture

Single Mode lets you watch two programs at once using PIP. The following instructions describe how to use PIP:

1. Press the PIP button. The **PIP** window displays in the lower-right corner of the screen.



2. Press the POSITION button to move the **PIP** window to a new location on the TV screen. Each time you press the POSITION button, the **PIP** window moves to another location.



3. Press the SWAP button. The channel that was shown in the PIP window will now be shown on the full screen.

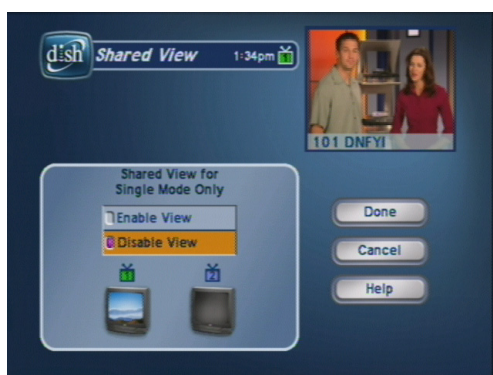


4. Press the PIP button again to enlarge the **PIP** window.
5. Press the PIP button once more to close the **PIP** window.

Using Shared View

Shared View is a feature of **Single Mode** that lets you activate the TV2 audio and video outputs to display the same programming as the TV1 outputs. While using this feature, both the green 1 and blue 2 remotes for your satellite receiver can control what is displayed on all TVs connected to the system. The following instructions describe how to enable **Shared View**:

1. Make sure the receiver is in **Single Mode**. The SINGLE front panel indicator should be lit. If not, press the MODE button the receiver front panel.
2. Press MENU-6-2 to open the **Shared View** screen. This screen is used in **Single Mode** only.



3. Select **Enable View**.

Note: If you do not want to display programming on any other TV besides TV1 and you do not want Remote Control 2 to control the receiver, select **Disable View**. The following screen is displayed on remote TVs when **Shared View** is disabled:



4. Select **Done**. All of the TVs connected to the satellite receiver are displaying the same program.

Switching Between Dual and Single Mode

Put the satellite receiver in **Dual** or **Single Mode** by pressing the front panel **Mode** button. Keep the following items in mind when switching the satellite receiver between **Dual** and **Single Mode**:

	Dual Mode	Single Mode
Indications	DUAL MODE front panel indicator lights.	SINGLE MODE front panel indicator lights.
Recording	The RECORDING front panel indicator lights to show which TV is currently recording.	The TV1 RECORDING front panel indicator lights when you are recording from one or both tuners.
Favorites Lists	Favorites Lists set up for both outputs (TV1 and TV2) are available.	Favorites Lists set up for only TV1 are available. The lists for TV2 are not lost, they are simply unavailable in Single Mode .
Locks	Locks set up for both outputs (TV1 and TV2) are available.	Locks set up for only TV1 are available. The locks for TV2 are not lost, they are simply unavailable in Single Mode .

Using the Remote Controls

Tip: Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

The following section describes how to use the remote controls with your satellite receiver. The remote control must be in **SAT** mode for the buttons to control the satellite receiver. You can also use the remote to control your VCR and other devices. See *Control Other Devices with the Remote* on page 106.

SAT Mode Button

Press the **SAT** mode button to set the remote to **SAT** mode, to control the receiver. The **SAT** mode button's back light turns **ON** briefly to show that the remote is set to **SAT** mode.



Power Buttons

Press the blank **POWER** button to turn TV1 or TV2 (depending on which remote is being used) **ON** or **OFF**. Press the **TV POWER** button to turn the TV on or off.

Note: You must program the remote to control your TV for the **TV POWER** button to work as described. See page 106 for instructions.

MENU



Menu Button

Press the MENU button to open the **Main Menu**.

PAGE



Page Up and Page Down (Arrow) Buttons

Press the PAGE UP button or the PAGE DOWN button to move, page by page, through the **Program Guide**, a **Theme** list, a **Favorites List**, an **Event Timers** list, a **Search** results list, or a list of channels.

MUTE



Mute Button

Press the MUTE button to turn off the TV sound. Press it again to restore the TV sound.

Note: You must program the remote to control your TV for the MUTE button to work as described. See page 106 for instructions.

VOLUME



Volume Button

Press the minus (-) side of the VOLUME button to lower the TV volume. Press the plus (+) side of the VOLUME button to raise the TV volume.

Note: You must program the remote to control your TV for the VOLUME button to work as described. See page 106 for instructions.

GUIDE



Guide Button

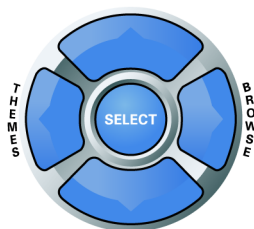
Press the GUIDE button to open the **Program Guide**. When the **Program Guide** is open, press the GUIDE button to switch among **Favorites Lists**.

TV/VIDEO



TV/Video Button

If you connect the receiver using its back panel **TV ANTENNA/CABLE IN** and **CH 3-4** connections, use this button to switch the receiver **CH 3-4** output between the satellite programming and another video signal such as cable or broadcast TV antenna connected to the receiver's **TV ANTENNA/CABLE IN**.



Arrow Buttons

- Change channels while watching TV - Press the UP and DOWN ARROW buttons.
- Open the **Browse Banner** - Press the RIGHT ARROW button.
- Show **Themes** - Press the LEFT ARROW button.
- Move around within the **Program Guide**, menus, and **Browse Banner** - Press the UP, DOWN, LEFT, and RIGHT ARROW buttons.
- Delete - Press the LEFT ARROW button to delete characters while using **Search**. See page 91 for instructions.



Select Button

Press the SELECT button to select the option you highlight in a menu.



Recall Button

Press the RECALL button to go back to the last satellite receiver channel you were watching. Press it again to switch between the last two satellite receiver channels you were watching.



Info Button

- Program information - Press the INFO button for more information when you watch a program, or when you have the **Program Guide**, **Browse Banner**, or **Themes** list open.
- Help - Press the INFO button to see help information when a **Help** button appears in a menu.



View TV Button

Press the VIEW TV button to close all menus and go to watching programming. Press the VIEW TV button to briefly display the **Program Banner** while watching a program.



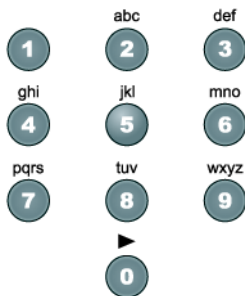
Cancel Button

Press the CANCEL button to cancel and go back to the previous menu or to watch a program.



DISH Button

Press the DISH button to go to **dish home Interactive TV**.



Number Pad Buttons

When watching a program or with the **Program Guide** open, use these buttons to enter a channel number to change to that channel.

- When the **Program Guide** is open, you can skip ahead and then back a number of hours. Just enter the number you want to skip ahead (or back), and then press the RIGHT (or LEFT) ARROW button.
- Use these buttons to enter menu option numbers instead of highlighting the option and then pressing the SELECT button.
- Use these buttons to enter numbers in a menu:
 - Highlight the place where you want to enter the first number, and press the appropriate number buttons on the remote.
 - Use the LEFT or RIGHT ARROW button to move the highlight to the next place where you want to enter a number. When you are done entering numbers, press SELECT.
- Use the letters above the NUMBER PAD buttons while in the **Search** menu. See *Using Text Fields* on page 61.



Star Button

Press the STAR button to:

- Open the **DVR Events** menu.
- Backspace without deleting while using the **Search** function of your.



Zero Button

Press the ZERO button to forward space while using the search function of your receiver.



Pound Button

Press the POUND button to display the **Search** screen.



Recover Button

Press the RECOVER button if you accidentally change the channel or video input on your TV and cannot get the picture back from your satellite receiver. When you press the RECOVER button as described below, the remote control sends commands to your TV to change channels or video inputs to try to get you back to watching satellite programming. This procedure works only if you have accidentally changed the TV channel or video input. It does not recover lost satellite signal (See *Chapter 5 - Reference* for troubleshooting information).

The following setup is required to use the RECOVER button:

- The remote control must be set up to control the TV and, if installed, the VCR (see page 106).
- If a VCR is installed, make sure it is connected as shown on page 41.
- On a remote TV, the RECOVER button must be programmed to tune your remote TV to the specific channel to receive TV2 programming (for example, channel 60), using the instructions on page 25.

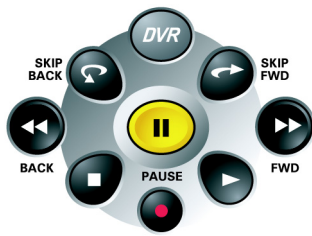
To use the RECOVER button, complete the following instructions:

1. Press and hold the RECOVER button until all four mode buttons light, and then let go of the button. The SAT mode button flashes twice and then all four mode buttons flash three times.
2. Press the RECOVER button. Wait for the TV or VCR mode button to flash once and then all four mode buttons to flash once.

3. If you see the **System Info** screen, press the **SELECT** button to close the screen. You have recovered your satellite video.
4. If you do not see the **System Info** screen, repeat steps 2 and 3 until you have recovered your satellite video.

Note: Press any remote control button other than the **RECOVER** button to end this procedure.

Note: If the **RECOVER** button is not programmed to a specific channel, the **RECOVER** button will first try to tune your TV to channel 3, then channel 4, and then other video inputs with each press of the **RECOVER** button. You may need to press the **RECOVER** button up to 30 times to recover your satellite TV video. If the **RECOVER** button is programmed to a specific channel (see page 25), the **RECOVER** button will tune the TV to the specific channel (for example, channel 60).



DVR Buttons

Use these buttons to record or play back a DVR program. See *Using the DVR Features* on page 85 for details.



PIP Button

Press the **PIP** button to open the **PIP** window. To make the **PIP** window larger, press this button again. Press the button a third time to close the **PIP** window. This button is active only in **Single Mode**.



Swap Button

Press the **SWAP** button to swap the video in the main display with the video in the **PIP** window. This button is active only in **Single Mode**.



Position Button

Press the **POSITION** button to move the **PIP** window to different positions on the TV screen. Each press of this button move the **PIP** window. This button is active only in **Single Mode**.

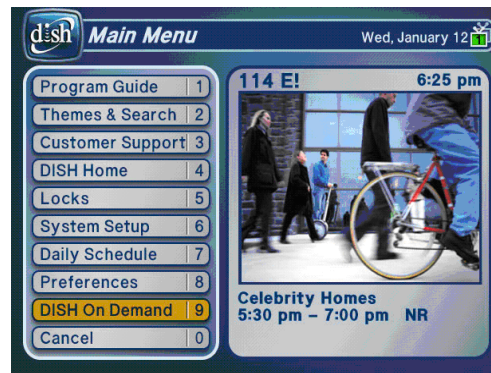
Using the Menus

The menus make using the receiver and selecting programs quick and easy. Use the menus to control the receiver and to use its features, such as setting locks, choosing a program, or creating a favorites list.

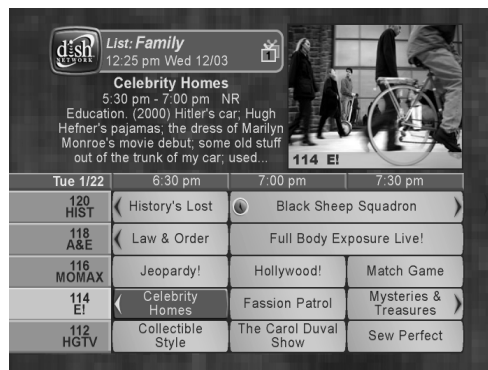
Open and Close Menus

You can open the menus in either of two ways:

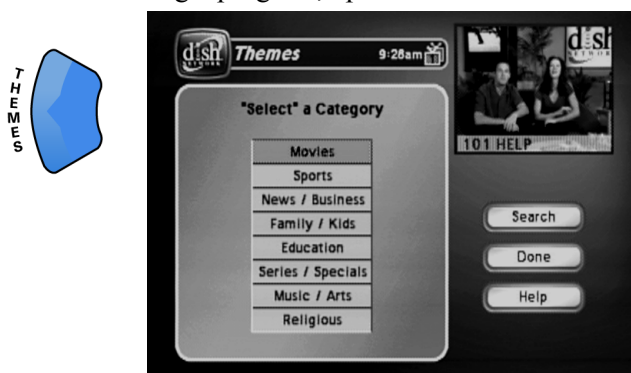
- Press the **MENU** button to open the **Main Menu**, then open any of the other menus from the **Main Menu**.



- Use the matching buttons on the remote control:
 - Open the **Program Guide**.



- When watching a program, open the **Themes and Search** menu.



- Display the **Browse Banner**.



To close a menu and return to watching a program, press either the **VIEW TV** or **CANCEL** button.

Note: If you do not do anything in a menu for several minutes, the menu automatically closes. This will discard any changes you made, and display the program you were watching.

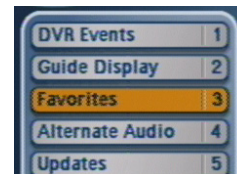
Highlighting Menu Options

To highlight a menu option, use the remote control **ARROW** buttons to move the on-screen highlight to the menu option. When you do move the on-screen highlight, the option becomes amber. The highlight is like the one that you may have seen on a computer screen.

Selecting Menu Options

When you select a menu option, that option takes effect right away. You can select a menu option in either of two ways:

- If the option has a number next to it, press the number on the **NUMBER PAD** button that matches this number. When you use the **NUMBER PAD** button, you do not need to highlight the option first.
- Move the highlight to the menu option using the remote control **ARROW** buttons. Then press the remote control **SELECT** button. In the example, **Favorites** is highlighted.

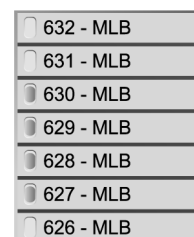


List of Choices in the Menus

When you make a choice in a list, the receiver does not apply the change until you select the **Save** or **OK** option. If you do not want to save any changes, select the **Cancel** option to discard all the changes made in the menu.

There are two types of lists:

- A single choice list allows you to select only one choice at a time. If you select another choice, your previous choice is deselected.
- A multiple choice list allows you to select more than one choice at one time. If you select another choice, your previous choice(s) stays selected.



Highlighting a Choice in a Menu List

Use the remote control **ARROW** buttons to move the highlight to the desired item in the list. The black arrows on the list show where you can move the highlight.

Selecting a Choice in a Menu

To select a choice in a list, highlight the choice and then press the remote control **SELECT** button. Make sure you select the **Save** or **OK** option to save your choice. Select the **Cancel** or **Done** option to discard your choice.

Canceling a Procedure

You can cancel a procedure in any of three ways:

- If you want to return to watching a program, press the remote control VIEW TV button.
- If you want to return to the previous menu, press the CANCEL button.
- Wait a few moments and the menu will close automatically, discarding any changes you have made.



Note: If none of the above work, you must finish the procedure.

Using Text Fields

There are several screens that require you to enter information into areas known as *fields*. Your receiver has two basic ways to enter the information:

- Virtual Keyboard
- Remote Control NUMBER PAD

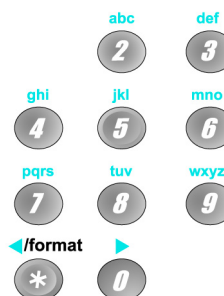
Using the Virtual Keyboard

Use the virtual keyboard letters to type the information. Use the LEFT, RIGHT, UP, and DOWN ARROWS to navigate around the keyboard. Select the characters you want.



Using the Number Pad

Use the letters above the NUMBER PAD on the remote control while the highlight is in the field. For example, when looking for the channel and times to watch *Rudy Fremmel Presents*, you press 7 three times for an R, 8 two times for a U, 3 one time for a D, and 9 three times for a Y to spell the word "Rudy."



While in the Field

When the cursor is in the field:

- Press the **Left arrow** to delete characters.
- Press **STAR** to backspace without deleting characters.
- Press **0** to enter a blank space, such as between words.
- Use the **RIGHT ARROW** to forward space without deleting characters.

Changing Channels

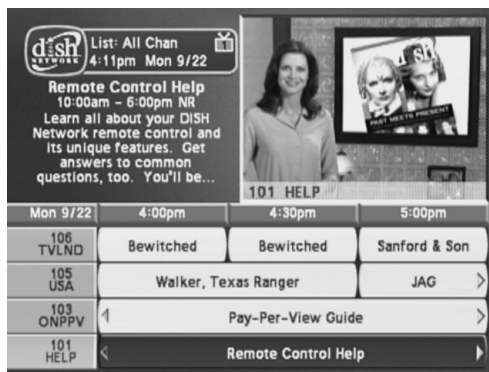
There are three ways to change channels:

- Press the UP or DOWN ARROW buttons.
- Use the NUMBER PAD buttons.
- Press GUIDE and then select the channel from the **Program Guide**.

Using the Program Guide

The on-screen **Program Guide** provides a complete listing of the available channels and programs. You can use the **Program Guide** to change channels, to see what programs are scheduled, to set up timers, and to buy Pay-Per-View programs.

Tip: If the program is on a channel that is not part of your subscription, the channel will be in red.

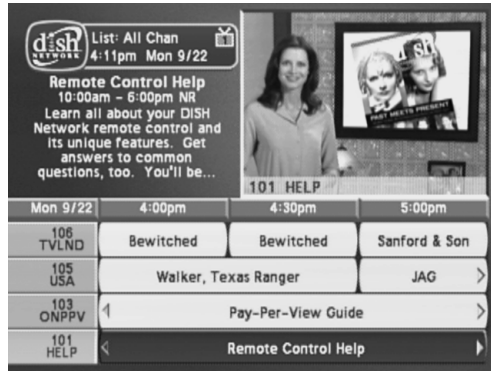


The **Program Guide** shows which **Favorites List** is active. If the **All Chan** list is active, the Program Guide shows all of the channels available from DISH Network. If the **All Sub** list is active, the **Program Guide** displays only the channels in your subscription. When another list is active, the **Program Guide** displays only the channels in that list.

For more information, see *Using Favorites Lists* on page 67. The **Program Guide** shows programs that are on now and that are scheduled several days in advance. The guide does not show programs that have ended.

Changing the Channel in the Program Guide

1. Press **GUIDE** to open the **Program Guide**.



Tip: When using the Program Guide, do you want to know who is in the movie you're about to watch? Press the **INFO** button to find out. When you're finished, press the **CANCEL** button to return to the Program Guide.

2. Choose a channel using either of the following:
 - Use the **NUMBER PAD** buttons to enter the channel number. The **Program Guide** displays a block of channels including the one that you just entered.
 - Use the **ARROW** buttons to move the highlight to the channel.
3. Press the **SELECT** button to change to the new channel.
4. Press the **CANCEL** button to close the **Program Guide** without changing the channel.



Tip: Selecting a program that is not on yet will open the **Timers** menu. See page 67 for information on setting timers.

Scrolling Through the Program Guide

There are two ways to scroll through the **Program Guide**:

- Scroll by channel - Press the **PAGE UP** or **PAGE DOWN** button to scan, page by page, through the listing of channels.
- Scroll by time - Enter the number of hours that you want to skip, using the **NUMBER PAD** buttons. Then, press the **LEFT** or **RIGHT** **ARROW** button.
- Scroll by day - Press **SKIP FWD** to scroll ahead in the **Program Guide** 24 hours each time you press the button. After you skip ahead at least one day in the **Program Guide**, press **SKIP BACK** to scroll back 24 hours each time you press the button (until you are on the current date).



Displaying Program Information

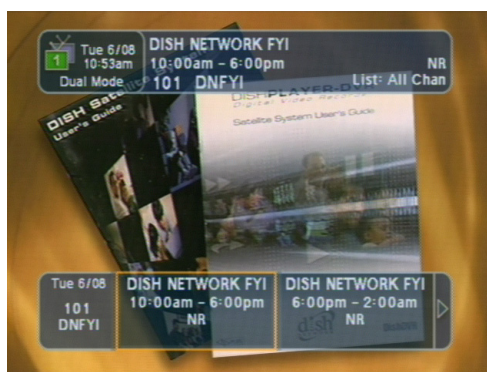
The Program Banner

The **Program Banner** provides information about the program you are watching. The receiver displays the **Program Banner** for a few seconds at the top of the TV screen every time you change the channel or press the remote control **VIEW TV** button.



The Browse Banner

You can use the **Browse Banner** to change channels, or to see what other programs are available without changing the program that you are watching. The receiver displays information on the program you are watching at the top and **Browse Banner** information at the bottom of the TV screen.

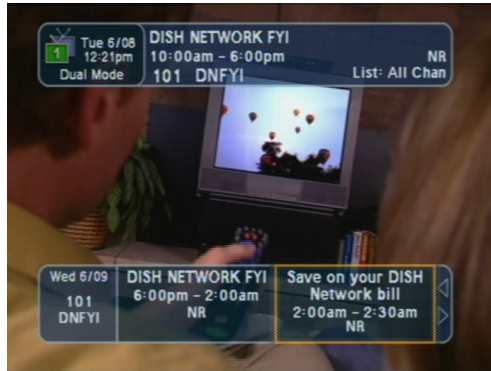


Note: If the **All Chan Favorite** List is active, the **Browse Banner** displays all the channels. If the **All Sub** list is active, the **Browse Banner** displays only the channels in your subscription. If a **Favorites List** is active, the **Browse Banner** displays only the channels in that list.

If you have set up the **Program Guide** to hide adult channels and the receiver is locked, the **Browse Banner** does not display such channels.

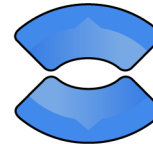
Using the Browse Banner

1. Press the **BROWSE** (RIGHT ARROW) button to open the **Browse Banner**.

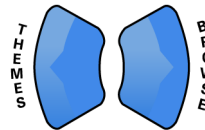


Tip: When using the **Browse Banner**, do you want to know when the movie you're about to watch was made? Press the **INFO** button to find out. When you're finished, press the **CANCEL** button to return to the **Browse Banner**.

2. Change the channel displayed on the **Browse Banner** by doing one of the following:
 - Enter the channel number for the program that you want, using the **NUMBER PAD** buttons.
 - Press the **UP** or **DOWN ARROW** to display the next channel.



3. Press the **RIGHT ARROW** button multiple times to highlight the next programs. Press the **LEFT ARROW** button to return to the current program.



4. Close the **Browse Banner** by doing one of the following:

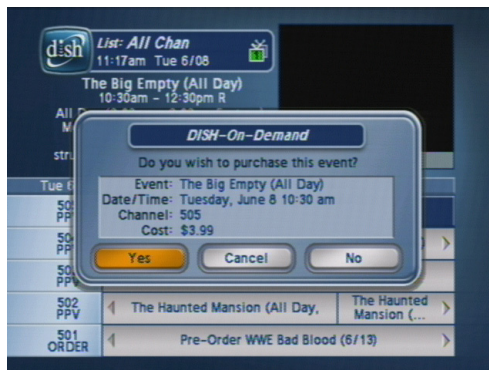
- Press the **SELECT** button to watch the program.
- Press the **VIEW TV** or **CANCEL** button to close the **Browse Banner** without changing the channel.



Tip: If you choose a program that is on next, you'll see a **Timers** menu. See page 67 for more information.

Ordering Pay-Per-View Programs

1. Select a Pay-Per-View program in the **Program Guide**. A message like the following displays:



2. To buy the Pay-Per-View program, select the **Yes** option. The receiver displays a confirmation menu.

Note: When you confirm an order for a Pay-Per-View program, you cannot cancel the order and you will be billed for it.

Ordering DISH On Demand

Note: DISH On Demand will be available with a future software upgrade.

DISH On Demand is DISH Network's Video On Demand service. Enjoy Movies On Demand and other exciting DISH On Demand programs. With Movies On Demand, you have immediate access to the newest movies on DISH Network. You can even use your DVR buttons (PAUSE, FWD, and BACK) to enhance your viewing experience.

The following are details about this important feature:

- You can repeatedly watch a rented program for the period of time (for example, 24 hours) listed. Rented programs cannot be saved to the **DVR Events** list.
- The **Play List** shows you how much time you have remaining on your DISH On Demand Programs.
- You can use Pay-Per-View Locks and Ratings Locks to control the programs your family views. See *Using Locks* on page 93.
- Be sure to keep **Updates** and **Inactivity Standby** enabled so that your receiver always has the latest DISH On Demand programs. See *Updates* on page 105.
- You can review what you have rented during the last 30-60 days by looking in **Purchase History**.
- The programs you rent will appear on your DISH Network bill.
- For more information, go to dishnetwork.com/ondemand.

Tip: Keep Updates and Inactivity Standby enabled so that you'll always have the latest DISH On Demand programs.

To order a DISH On Demand program:

1. Press the DVR button to open **DISH On Demand**.
2. Select **Movies & More**.
3. Use the LEFT and RIGHT ARROW buttons to scroll through your program choices.
4. Select the program you want to watch and follow the on-screen instructions.

Note: When you confirm an order for a DISH On Demand program, you cannot cancel the order and you will be billed for it.

Reviewing Purchase History

Press MENU-6-5 to open the **Purchase History** screen. This screen shows a list of events you've purchased, including those you have watched and those you purchased but have not yet watched.



Using Favorites Lists

Favorites Lists are lists of your favorite channels. You can create and change the lists yourself, adding and removing channels as you wish. Your favorite channels can be grouped into no more than four lists for both **TV1** and **TV2** (in **Dual Mode**). For example, one **Favorites List** could have 100 channels and a second list only 10. Or all four lists (four for **TV1** and four for **TV2**) could have 50 channels each.

- When you make a **Favorites List** active, the **Program Guide** displays only the channels in that list. Also, the receiver skips channels that are not on the list when you use the remote control UP or DOWN ARROW button to change channels.
- The **All Chan Favorites List** contains all the channels. You cannot make any changes to the **All Chan** list.
- The **All Sub Favorites List** contains all the channels in your subscription. You cannot make any changes to the **All Sub** list, except by changing your subscription.
- Each **Favorites List** has a unique color in the **Program Guide**. You can give each list a name. When you first get the receiver, the four lists are empty and are named **List 1**, **List 2**, **List 3**, and **List 4**.

- When you put the receiver in **Single Mode**, the **Favorites Lists** for **TV2** are not available.
- If you choose a program using **Themes** or by entering most channel numbers, the receiver tunes to the channel for that program whether or not that channel is on the active **Favorites List**.

Creating or Changing a Favorites List

You can create, add channels to, and remove channels from a **Favorites List**.

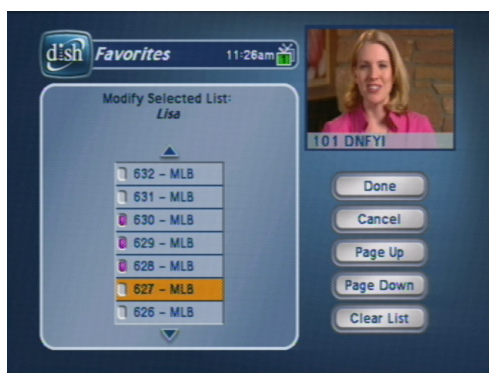
1. Press the MENU-8-3 to open **Favorites**.



2. Select the **Favorites List** that you want to create or change.

Note: You cannot modify the **All Chan** or **All Sub** lists.

3. Select **Modify List**.



4. In the **Channels** list, highlight a channel you want to add to the **Favorites List**.
5. Press **SELECT** to add the highlighted channel to the **Favorites List**. A dot appears next to the channel.
6. Repeat steps 4 and 5 until you have added all the channels that you want.
7. To delete a channel from the **Favorites Lists**, select the channel in the list. The dot next to the channel disappears.
8. Select the **Done** option to save all changes to the **Favorites List**.

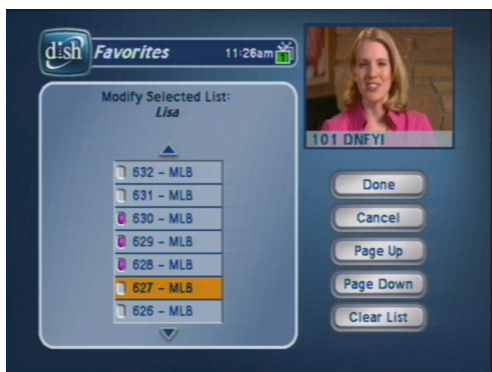
Note: Make sure your **Favorites List** has at least one channel.

Naming a Favorites List

1. Press MENU-8-3 to open **Favorites**.
2. Select the **Favorites List** that you want to change.
3. Select the **Edit Name** option.

Note: You cannot change the name of the **All Chan** or **All Sub** list.

4. Enter the list's name by either using the virtual keyboard or the remote control **NUMBER PAD** to enter the letters in the **Enter List Name** box. See *Using Text Fields* on page 61 for instructions.



5. Select the **Done** option to save all changes.

Making a Favorites List Active

If the **Program Guide** is open, press the **GUIDE** button to select the next **Favorites List**. Press the **GUIDE** button repeatedly to scan through all the available lists.

Note: This works only if you have added channels to the **Favorites List**. If you have not created any **Favorites List**, pressing the **GUIDE** button switches the receiver between the **All Chan** and **All Sub**.

Using Timers and Recordings

A timer is your instruction telling the satellite receiver the programs you want to view in the future. For most DVR timers, you select a specific program on a specific channel, and tell the satellite receiver how often you want to record that program.

A recording is the actual program stored for you to watch. DVR recordings are listed in the **DVR Events** screen, which you can find quickly by pressing **DVR** on the remote control.

Remember: Most TV programs and films are copyrighted. In some cases, copyright law may apply to private, in-home recording.

Overview

Refer to this section as you get familiar with how to set up **Timers**.

Timer Types

There are three types of timers:

- **DVR** - Records an event onto your receiver for later viewing.
- **Auto** - Automatically changes the channel for live viewing of the event.
- **Reminder** - Creates an on-screen reminder when the event is about to air.

Timer Frequency

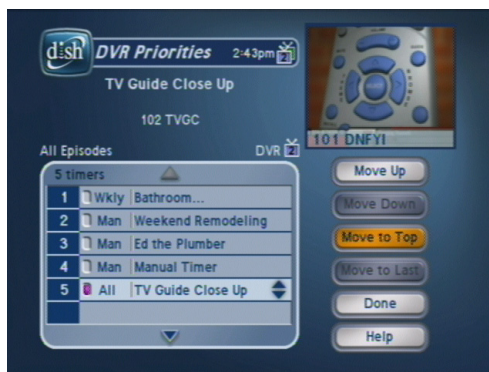
Deciding how often you want to watch a program will help you make the best choice:

- **All Episodes** - Records each time that program is on that channel.
- **New Episodes** - Records current season programs each time they occur on that channel.
- **Once** - Records a program once (good for movies, sporting events, etc.).
- **Weekly** - Records a program once a week, at that time, on that channel.
- **Daily** - Records a program once a day, at that time, on that channel.
- **Monday-Friday** - Records a program once a day, Monday through Friday, at the selected time, on that channel.
- **DISH Pass** - Records programs on all channels (default) or a specific channel, based on your specific criteria. See page 77 for details.

Note: **Weekly**, **Daily**, and **Monday-Friday** timers will move only if the program is within one hour earlier or four hours later than the original time the timer was set up. These timers will adjust their length if their program's time block is extended.

Timer Priorities

Priorities are used by the receiver to know which program you would prefer to record, if multiple timers are scheduled to start at the same time.



For example, having six programs scheduled to record at the same time cannot be done on a dual-tuner receiver; therefore, the receiver will record only the two programs with the highest priorities.

- All timers have a priority that you can change at any time.
- The larger the number, the lower priority (for example, priority 1 is higher than priorities 2, 3, and 4).
- You can override a specific timer's priority with a one-time skip or by restoring it. Select a timer in the **Daily Schedule**, then you'll have an option to **Skip** or **Restore** for that timer.

Timer Options

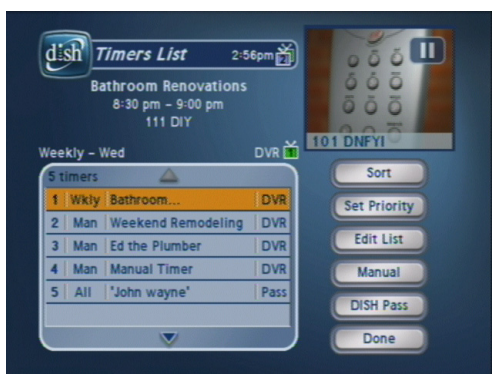
The **Timer Options** screen lets you set the following (not used on all options screens):

- **Protect Event** - Prevents your programs from being erased when the receiver fills up.
- **Set Channel** - Select a specific channel.
- **Start Early** - Select this option if you want to begin recording a few minutes early.
- **End Late** - Select this option if you want to continue recording after the scheduled program ending.

Note: **DVR Timers** set for sporting events automatically have a late end time of 60 minutes to allow for overtime.

Timers List

The **Timers List** shows you all of the timers you have set up on your receiver.



Use the **Timers List** as described on page 73 to:

- View the general list of timers.
- If you select a timer from this list, you'll see a detailed list with specific dates and times of upcoming timers for that program or **DISH Pass** search term(s).
- Set user-selected priorities for each timer. See *Timer Priorities* in the previous section.

- Create a **Manual** timer.
- Create a **DISH Pass** timer.
- Select **Edit List** to edit a timer.

Daily Schedule

The **Daily Schedule** lists the timers that are planned for today, the future (up to nine days), and those that occurred in the recent past.



Use the **Daily Schedule** as described on page 74 to:

- Review today's timers. You can choose to skip a scheduled timer, or restore a timer that was not planned to occur, perhaps because of a conflict with another program. See *Timer Priorities*.
- Review future timers, up to nine days in advance, and make changes as necessary.
- Review past timers to see which occurred, and the reason why one did not, if applicable. See *Reasons Why Timers Are Skipped*.

Reasons Why Timers are Skipped

If a timer is skipped, the reason is stated on the **Timers List**.

- **Priority** - This timer had a lower priority than other events being recorded at the time.
- **User** - A user chose to skip that timer.
- **Duplicate event** - There is already another timer set to record that program.
- **Event exists in DVR** - The program was already recorded and can be seen in the **DVR Events** list.
- **Not a new episode** - Used for **New Episode** timers. Currently, a **New Episode** is one that has the current year listed in the **Program Guide** information.
- **Incorrect event** - For **Weekly**, **Daily** and **Monday-Friday** timers. If the guide has a different event listed the timer will be skipped. For example, the timer was set up on a Saturday for **Daily**, but the program is broadcast only Monday-Friday, so the timer will be skipped on the weekends.

When a Timer Starts a Recording

For two minutes before an timer starts a recording, the receiver may display a digital countdown on the TV screen. This symbol disappears when the program begins. While the symbol is displayed, you may do one of the following:



- Press **CANCEL** to clear the symbol from the TV screen. This does not stop the timer from starting.
- Press **INFO** or **SELECT** to see more information on the timer. If you do this, you have the following choices:
 - Select **OK** to continue with the timer.
 - Select **Stop Timer** to stop the timer.

Note: Pressing **INFO** about a timer event only works one time. Subsequently pressing **INFO** results in the current program's information being displayed in the normal way.

When the Receiver is Off

If the receiver is off when a timer is scheduled, the receiver will:

- **DVR** - Remain off but will record the scheduled
- **Auto** - Turn on for the event.
- **Reminder** - Turn on at the scheduled time. After a period of time, if you do nothing, the receiver will turn off.

Special Considerations When Using Timers

- **For Locked Programs** - You must enter the receiver password before you can create an automatic timer. You can create a manual timer for a locked program without entering the password. However, if you do this, when the timer operates the receiver may display only an error or password entry menu.
- **For Pay-Per-View Programs** - You must order a Pay-Per-View program when you create a timer for it.
- **For Blacked Out Programs** - If you set a timer for a program that is blacked out in your area, when the timer operates the receiver may display only an error.

Using the Timers List

1. Press **MENU-7**.
2. Select **Timers**. When the **Timers** screen opens, you can edit or delete the timers you have set.

Using the Daily Schedule

Use the **Daily Schedule** to plan and manage your timers.

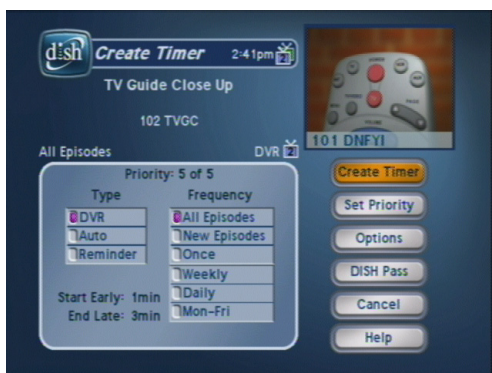


1. Press **MENU-7**.
2. Use the **ARROWS** to select a future program if you want to skip or restore a timer. You can also choose to protect it, or view the start early/end late settings.
 - To change the start early/end late setting, you must select the event within the **Timers List**.
 - If the program is a **DISH Pass** timer, you cannot change the start early or end late times on an individual program; it must be changed on the **DISH Pass** timer, from the **Timers List**.
 - Press **PAGE UP** to see the previous days' timers. Review these timers if you want to see the result of your timers (e.g. if it recorded successfully or why it might have been skipped).
3. Select **Done**.

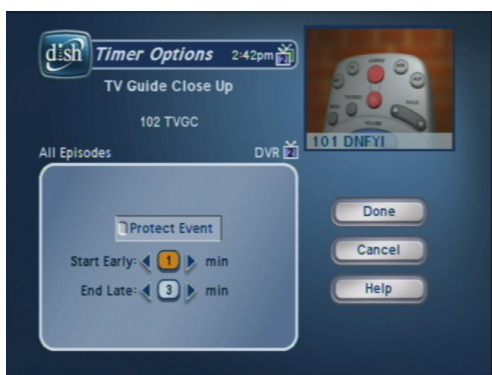
Setting Up an Automatic Timer

The following instructions explain the easiest way to set up an automatic timer.

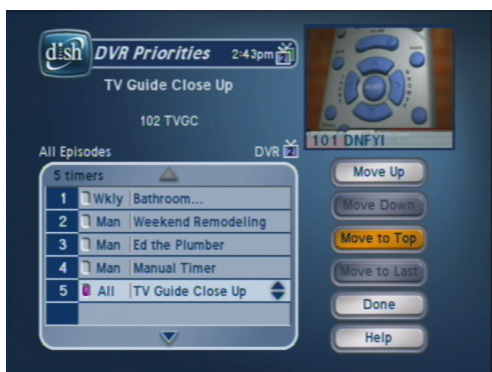
1. Find the program that starts in the future you want to record using the **Program Guide** or **Browse Banner**.
2. Select the future event. The **Create Timer** screen displays.



3. Select the **Timer Frequency** (see page 70 for more details).
4. Select a **Timer Type** (see page 70 for more details).
5. Select **Options** (see page 71 for more details).



6. Select **Set Priority** if you would like to change the priority of the timer (see page 70 for more information).



7. Select **Create Timer** to finish making the new timer.

Tip: You can edit and delete timers from either TV output.

Tip: Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

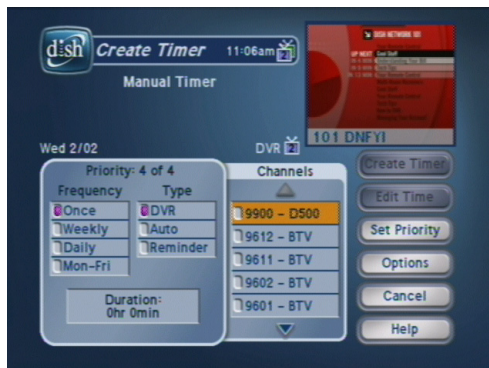
Tip: You can edit and delete timers from either TV output.

Tip: Use the **PAGE UP** and **PAGE DOWN** buttons to scroll quickly through the channel list.

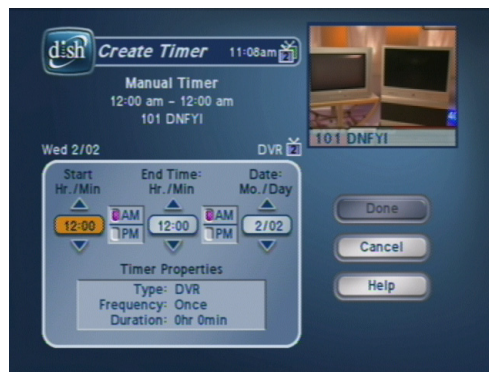
Setting Up a Manual Timer

A **Manual Timer** lets you set custom start and stop times for a timer.

1. Press **MENU-7**.
2. Select **Timers**.
3. Select **Manual**.



4. Select the **Timer Frequency** (see page 70 for more details).
5. Select a **Timer Type** (see page 70 for more details).
6. Select **Options** (see page 71 for more details).
7. Select the channel. Use the **UP/DOWN ARROWS**, **PAGE UP/DOWN**, or **NUMBER PAD** to find the channel.
8. Select **Edit Time**.



9. Set the **Start Time** and **End Time**, include **AM/PM** for each.
10. Set the **Date**.
11. Select **Done**.
12. Select **Create Timer**.

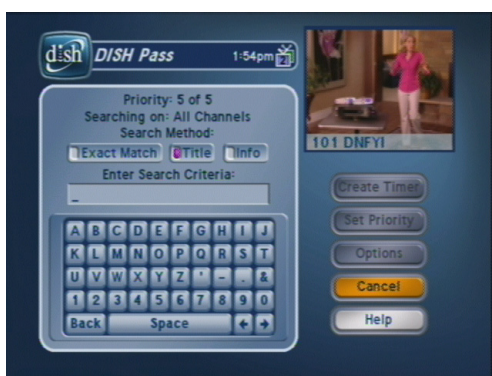
Setting Up a DISH Pass™ Timer

DISH Pass lets you create timers to record programs automatically based on your search criteria. When the receiver finds programs that meet your search criteria, it will automatically set a timer to record that program. As the program guide is updated, DISH Pass will continue to find and record your shows based upon your search criteria. Note that DISH Pass only finds programs on satellite channels.

An example of how you can use DISH Pass may be that you saw a movie in the theaters and you want to watch it again as soon as it comes out on a movie channel. Use the Exact Match and Title, and then type the exact title of the movie. If the movie is made available on a movie channel you subscribe to, the receiver will automatically set a timer to record that movie for you.

Note: DISH Pass recordings may fill the hard drive quickly. If you have other timers you know you don't want to be recorded over, choose **Protect** on those important programs.

1. Press MENU-7.
2. Select **DISH Pass**.



3. Select the **Search Method**:
 - **Title** - Search for programs by title.
 - **Info** - Search for programs whose descriptions or titles contain key words.
4. Optionally, select **Exact Match** if you want to find exactly what you've entered in either the program title or info, when you select the **Title** or **Info**, respectively.
5. Enter your search criteria. You can use the keyboard shown on the screen or you can use the letters above the **NUMBER PAD** buttons on the remote control while the highlight is in the **Enter Search Criteria** field. See *Using Text Fields* on page 61 for instructions.
6. Select **Options** as described on page 71.
7. Select **Create Timer**. When the receiver has completed your search, the **Timer Schedule** will display the results.

Using the System

Tip: It's very important to leave the receiver enabled to receive Updates. By doing this, the Program Guide will have the most up-to-date information, and can adjust or create timers accordingly. Make sure the Updates feature is enabled as described on page 107.

Note: After entering your search words, and selecting **Create Timer**, be sure to review the timers that **DISH Pass** creates—some may not be what you are expecting. You can:

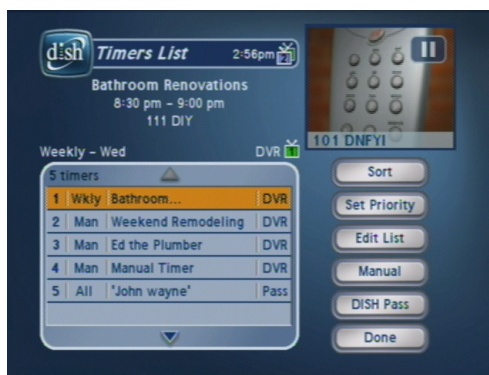
- Pick selected events to skip. You will need to review future timers each time the **Program Guide** is updated.
- Adjust your search terms and method. Select **Set Priority** if you would like to change the priority of your **DISH Pass**. To adjust your search, delete the unwanted DISH Pass timer and try the following:
 - Change your **DISH Pass** search term(s) to be more specific.
 - Select **Exact Match** with the **Title** or **Info**.
 - Choose **DISH Pass** when you select a future program within the **Program Guide**, **Browse Banner**, or **Search**. This will enter the program's exact title.

8. Select **Done**.

Deleting a Timer

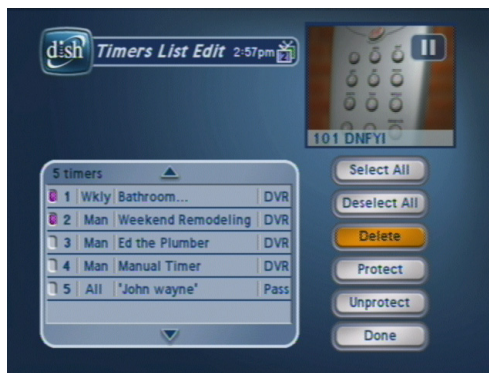
When you no longer need a timer, you can delete it.

1. Press MENU-7 to open the **Daily Schedule** screen.



2. Select **Timers** to display the **Timers List**.

3. Select **Edit List**.



4. Select the timer or timers you want to delete.
Note: **Select All** if you want to delete all of your timers.
5. Select **Delete**. The timer(s) are deleted.

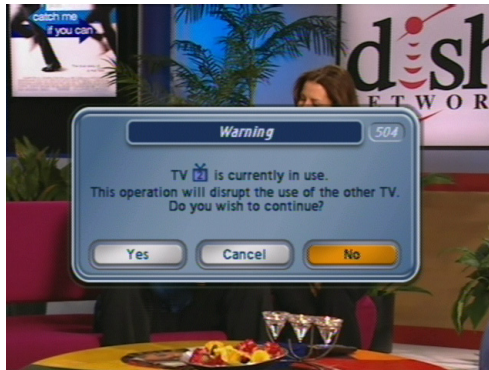
Watching One Program While Recording Another

Single Mode

While in **Single Mode**, you can set up the satellite receiver to record programs while you're also watching one you've already recorded.

1. Press the front panel **MODE** button to make sure the receiver is in **Single Mode**. The front panel of the receiver has an indicator that is marked **Single**.

Note: If someone is using the TV2 outputs, you will see the following popup on the nearby TV warning you that you are about to disrupt the use of the TV2 outputs:



2. Press **GUIDE** to open the **Program Guide**. Find a program you want to watch now.
3. Press **SELECT** to watch that program.
4. Press the **RECORD** button. A message will display asking whether you want to record the remainder of the program. Select **OK** to begin recording now.

GUIDE

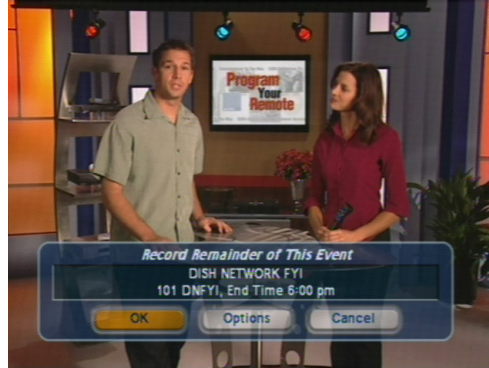


SELECT



RECORD

Tip: You can use the Front Panel Locks to prevent the Mode from being changed accidentally. See page 97 for instructions.



5. Press **GUIDE** on the remote. Use the **Program Guide** to find a program that you want to watch now. Select that program. You are now watching one program while recording another.
6. Press **RECORD** and select **OK** when the popup displays. You are now recording two programs at the same time.
7. Press **DVR** on the remote control. The **DVR Event** screen will open. You should see the two programs that are recording indicated by the red dot next to the listings.



8. Select a program that you recorded earlier (one that is not recording now), then select **Start Over**.
9. You should now be watching a pre-recorded program while the receiver is recording the other two events (programs).

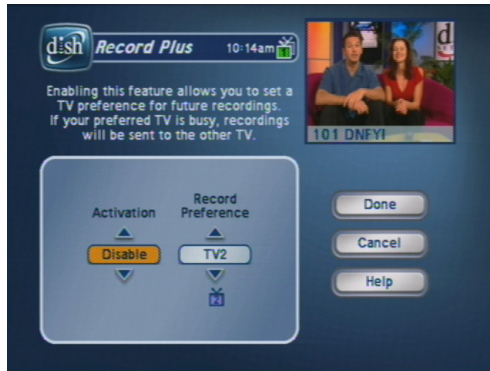
Dual Mode with Record Plus

Another feature that adds flexibility to the way you watch TV is **Record Plus**. When **Record Plus** is enabled, you can decide which receiver output (**TV1** or **TV2**) will record your events. This feature is available in **Dual Mode** only.

Enabling Record Plus

The following instructions describe how to enable **Record Plus**:

1. Press MENU-8-6 to open the **Record Plus** screen.

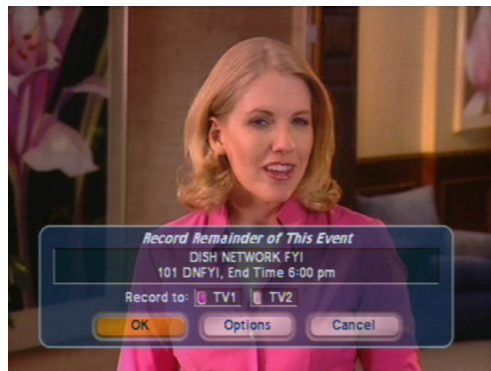


2. Highlight the **Activation** option.
3. Use the UP or DOWN ARROW button to set the **Activation** option to **Enable**.
4. Highlight the **Record Preference**.
5. Use the UP or DOWN ARROW button to set the **Record Preference** option to **TV2** (or **TV1**).

Recording Events with Record Plus

When you have **Record Plus** enabled, there are some differences in the way you record events.

1. Select a program you want to watch.
2. Press the RECORD button.



3. When the **Record Remainder of This Event** screen displays, select one of the following:

- From TV1, select **TV2**.
- From TV2, select **TV1**.

Note: When recording using **Record Plus**, it is possible for someone at the other TV to cancel your recording.

4. Select one of the following:

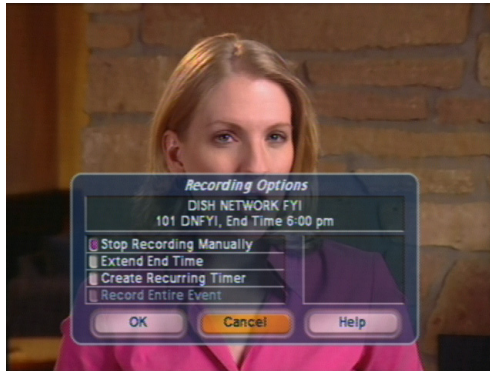
- Select **OK** to start the recording now.
- Select **Options** to customize the following:



- **Stop Recording Manually** - The receiver will record until you press **STOP**.
 - **Extend End Time** - You can set the stop time for the recording.
 - **Create a Recurring Timer** - You can set up a timer like the one described in *Setting Up an Automatic Event Timer*.
 - **Record the Entire Event** - The receiver stops recording at the end of the event. This selection is available only if the receiver was tuned to the channel at the beginning of the program.
5. Press **GUIDE** on the remote. Use the **Program Guide** to find a program that you want to watch now. Select that program. You are now watching one program while recording another.

Watching One Program While Recording Another

6. Press **RECORD**. Select one of the following:



- Select **OK** to start the recording now.
 - Select **Options** to customize the recording as described on page 82.
7. Press **DVR** on the remote control. The **DVR Event** screen will open. You should see the two programs that are recording indicated by the red dot next to the listings.



8. Select a program that you recorded earlier (one that is not recording now), then select **Start** or **Start Over**.
9. You should now be watching a pre-recorded program while the receiver is recording the other two events (programs).

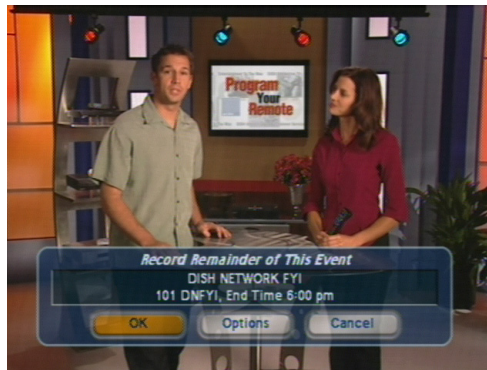
Dual Mode without Record Plus

While in **Dual Mode**, you can set up the satellite receiver to record from TV1 and TV2 at the same time.

1. Press **GUIDE** to open the **Program Guide**. Find a program you want to watch now.
2. Press **SELECT** to watch that program.



3. Press the **RECORD** button. A message will display asking whether you want to record the remainder of the program. Select **OK** to begin recording now.



4. Press **DVR** on the remote control. The **DVR Event** screen will open. You should see the program that is recording indicated by the red dot next to the listings.



5. Select a program that you recorded earlier (one that is not recording now), then select **Start Over**.
6. You should now be watching a pre-recorded program while the receiver is recording the other events (programs).

Using the DVR Features



Most satellite TV programs and films are copyrighted. In some cases, copyright law may apply to private, in-home recording.

The DVR features let *you* decide how to watch TV. You can pause, reverse, or skip back through a program. Then you can go back to watch, fast forward, or skip ahead through the program. Also, you can record and play back programs with full digital audio and video quality, without a VCR.

Auto Recording

If you get a phone call while you watch a live program, you can pause the program, answer the phone, go back to watch the program, and not miss *any* of the action.

You can pause, reverse, or skip back through a live program. Then you can go back to watch, fast forward, or skip ahead through the program.

You can also use slow motion forward and backward, and frame advance and reverse while using the DVR's auto recording feature.

Turn the receiver on and tune it to a channel. Then you can use the remote control's DVR buttons.

Note: When you press any one of these buttons, you'll see a small sign on the TV screen.

Press the **PAUSE** button to pause the program. Press this button *again* to watch the program from where it paused.



PAUSE



On some TVs, the presence of fixed images for extended periods of time may cause them to be permanently imprinted on the screen. Consult your TV user guide for information on whether this is a problem for your TV, what operating/viewing restrictions apply to avoid this problem, and associated TV warranty coverage.

Note: For a "live" program, the on-screen pause timer shows how long you've paused the program. If you've paused the program more than once, the pause timer shows the *total* time you've paused. If you pause after you reverse or forward, the pause timer shows how far you're behind the "live" program.

Press the **BACK** button *once* to reverse the program four times as fast as normal play. Press the **BACK** button *twice* to reverse at 15 times normal speed, *three times* to reverse at 60 times normal speed, and *four times* to reverse at 300 times normal speed. The on-screen bar shows how far you've gone.



BACK

Press the **PAUSE** button and then press the **BACK** button to reverse the program in slow motion. Press the **BACK** button once to reverse the program 1/4 the speed as normal play. Press the **BACK** button twice to reverse at normal speed.

Press the FWD (“FORWARD”) button *once* to forward the program four times as fast as normal play. Press the FWD button *twice* to forward at 15 times normal speed, *three times* to forward at 60 times normal speed, and *four times* to forward at 300 times normal speed. The on-screen bar shows how far you’ve gone.



Press the PAUSE button and then press the FWD button to forward the program in slow motion. When you press the FWD button once the program advances at 1/15 the speed of normal play. Press the FWD button twice to forward at 1/4 as fast as normal play. Press the FWD button three times to play the program.

Note: Of course, you *can’t* “forward” into the part of a “live” program that hasn’t been broadcast yet.

Press the PLAY button to watch the program. Also, press this button to switch from pause, forward, or reverse to play.



Press the SKIP BACK button to skip back about ten seconds in a recorded program. Press this button *again* to skip back again.



Press the PAUSE button and then press the SKIP BACK button to reverse the recording one frame at a time.

Press the SKIP AHEAD button to skip ahead about 30 seconds in the program. Press this button again to skip ahead again.



Press the PAUSE button and then press SKIP AHEAD to advance the recording one frame at time.

Press the VIEW TV button to catch up with the program as it’s showing now.

Recording a Program Now

When you record a program now:

- You can record a program that is on now or a future program to watch later.
- You can pause, go back to play, reverse, skip back, fast forward, or skip ahead through a recorded program.
- You can also use slow motion forward and backward, and frame advance and reverse while using the DVR’s auto recording feature.
- You can play back a program you already recorded and record a new program at the *same* time.

Note: If you record a locked program while you have the receiver locked, you’ll have to enter the password to play back that program.

Start Recording a Program

- *At a program's start*, press the remote control's RECORD button.
- *If you've watched a program **from its start**, up to about two hours after it's started, you can reverse to its start:*



1. Press the BACK button.
2. Let the program reverse to its start.
3. Press the RECORD button. You'll get *all* of the program on your recording.

Note: If you don't tune to a program until *after* it starts, you can record *only* the part of the program that comes *after* you tune to it.

Stop Recording a Program

- Press the remote control's STOP button.



When you press the RECORD button, the receiver stops recording at the end of the program. You can use an *Event Timer* to start and stop the recording:



- Use *Quick Record* to set a one-time DVR event timer for a future program.
- Set an *automatic* DVR event timer to record a future program that comes on each day or each week.
- Set a *manual* DVR event timer to make a future recording with start and stop times you set. This lets you record part of a program or a block of several programs, one after the other.

Use the DVR Events Menu

Press the DVR button to open the **DVR Events** menu, which shows all of the **DVR Events** recorded on the receiver. You can edit, delete, and protect any event shown on the menu.



Using the System

Tip: Press **DVR** on the remote to see a list of the events you've recorded. To view one of these events, just select it. You can then start the recording, start over, stop or resume play.

- If you hide adult channels and lock the receiver, this menu doesn't list any adult programs by name.
- To review programs you have recorded or have scheduled to record with the DVR features, use this menu.

The **DVR Events** menu shows you:

- A list of recorded events that includes the one you're recording now, if any.
Note: You can sort events either by date or the name of the event.
- **If you select any one of the events on the DVR Events menu** (even an event you're recording), you open an **information menu** for that event.
Note: This is just an example of the information menu. The information menu shows *only* the options for the event you select. For a different event, you'll see different options. You'll see some (not all) of the options we list below. You won't see an option to start recording; to do that, you must press the remote control **RECORD** button or set an event timer.
- **Note:** If you record a locked program while you have the receiver locked, you'll have to enter the password to play back that program.

There are several choices you can make from the **DVR Events** screen:

- **Sort** - You can sort your **DVR Events** by **Alphanumerics**, **Movies**, **Series/Specials**, **Sports**, **Date**, **Length**, or **Protected**.
- **Edit** - You can edit or delete **DVR Events**.
- **Timers** - When you select the **Timers** option, the **Timers** screen opens.

While Playing Back or Recording an Event

- Press the **PAUSE** button to pause the play back. Press this button *again* to go on with the play back.



On some TVs, the presence of fixed images for extended periods of time may cause them to be permanently imprinted on the screen. Consult your TV user guide for information on whether this is a problem for your TV, what operating/viewing restrictions apply to avoid this problem, and associated TV warranty coverage.

- Press the **BACK** button *once* to reverse the program four times as fast as normal play. Press the **BACK** button *twice* to reverse at 15 times normal speed, *three times* to reverse at 60 times normal speed, and *four times* to reverse at 300 times normal speed.
- Press the **PAUSE** button and then press the **BACK** button to reverse the program in slow motion. Press the **BACK** button once to reverse the program 1/4 the speed as normal play. Press the **BACK** button twice to reverse at normal speed.



- Press the FWD (“FORWARD”) button *once* to forward the program four times as fast as normal play. Press the FWD button *twice* to forward at 15 times normal speed, *three times* to forward at 60 times normal speed, and *four times* to forward at 300 times normal speed.
- Press the PAUSE button and then press the FWD button to forward the program in slow motion. When you press the FWD button once the program advances at 1/15 the speed of normal play. Press the FWD button twice to forward at 1/4 as fast as normal play. Press the FWD button three times to play the program.



Note: Of course, you can watch *any* part of an event you’ve already recorded.

- Press the PLAY button to play back or go on with a paused play back. Also, press this button to switch from fast forward or reverse back to normal play back.
- Press the SKIP BACK button to skip back about ten seconds in the event. Press this button *again* to skip back again.
- Press the PAUSE button and then press the SKIP BACK button to reverse the recording one frame at a time.
- Press the SKIP AHEAD button to skip ahead about 30 seconds in the event. Press this button *again* to skip ahead again.
- Press the PAUSE button and then press the SKIP AHEAD button to advance the recording one frame at a time.
- Press the STOP button to stop play back.



Play Back a Recorded Event and Record Another Event

1. Set up the receiver to make an on-demand recording.

Note: You can press the RECORD button or you can use any kind of event timer *except* a VCR event timer.

2. Press the DVR button. This opens the **DVR Events** menu.



Tip: With the DVR receiver, you can even watch one recorded event while recording another at the same time!

Using the System

Tip: If you want to archive an event to save it for a long time, you can move it from the receiver to a VCR.

3. Select an event on the **DVR Events** menu (*not* the one you're recording). This opens an information menu for that event.
4. Press the **PLAY** button.

Copy Recordings to Videotape

You may want to keep a videotape copy of a recording you made on the DVR. You will *not* be able to play back events with full digital audio and video quality from a videotape.



Many satellite TV programs and films are copyrighted. In some cases, copyright law may apply to private, in-home recording.

1. Connect the receiver's back panel audio/video outputs to the VCR's audio/video inputs.
2. Put a rewound tape into the VCR.
3. Turn the VCR on.
4. Press the remote control **DVR** button. This opens the **DVR Events** menu.
5. Select an event on the **DVR Events** menu. This opens an information menu for that event.
6. Start the VCR to record onto the tape.
7. On the event's information menu, select the **Start** option. The receiver begins to play back the event.
8. When the play back is done, stop the VCR.

Using Themes and Search

The **Themes and Search** feature of your receiver makes it easy to find programs to watch. This menu allows you to search for programming by themes (movies, sports, etc.) or by key words used in the program information.

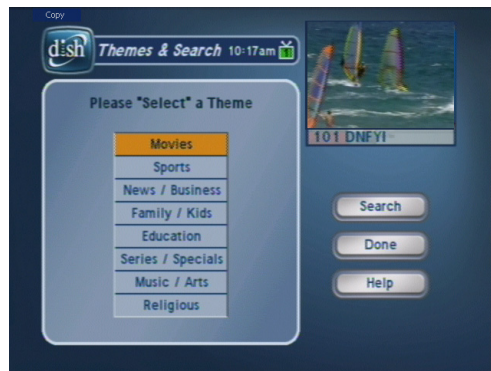
Themes

You can list and choose programs by the theme of their contents, for example, just movies or just sports. You can then quickly list programs based on that theme, and choose the program you want.

1. Open the **Themes and Search** menu by doing one of the following:
 - While watching a program, press the **LEFT ARROW** button.



- Press the **MENU** button, and then select the **Themes and Search** option.



- Select a category.
- Select a program in the list.

Note: If the program you highlighted is on some time in the future, the receiver will open the **Create An Event Timer** menu. See *Using Timers and Recordings* on page 69 for more information.

Search

- Open the **Search** screen by doing one of the following:
 - Press the **POUND (#)** button on the remote control.
 - While watching a program, press the **LEFT ARROW** button to display the **Themes and Search** menu. The select **Search**.
 - Press the **MENU** button, and then select the **Themes** option to display the **Themes and Search** menu. The select **Search**.
- The **Search** screen displays with a virtual keyboard.



3. You can search for events two ways:
 - Select **Title** to search for the words that appear in the title of a program.
 - Select **Info** to search for words that are in the program description.
4. You can use the keyboard shown on the screen or you can use the letters above the **NUMBER PAD** buttons on the remote control while the highlight is in the **Enter Search Criteria** field. See *Using Text Fields* on page 61 for instructions
5. Select **Search**.



6. When the receiver displays the **Search Results** you have the following options:
 - Use the **UP** and **DOWN ARROW** buttons to scroll through the results.
 - Use the **PAGE UP** and **PAGE DOWN** buttons to scroll a page at a time.
 - Select **Page Up** or **Page Down** to scroll a page at a time.
7. Select one of the programs to watch, or select **Done** to close the **Search Results** screen.

Note: If you select a program that is on now, the receiver tunes to that program. If you select a program that is on in the future, you will have to set a timer. See page 69 for more information on event timers.

Search History

After you have searched for programs or other information, your receiver builds a history. TV1 and TV2 keep separate **Search History** information. You can use the **Search History** instead of typing the information again with the virtual keyboard.

1. Press the **POUND (#)** button to open the **Search** screen.



2. Select **History** to display the **Search History** screen.



3. At the **Search History** screen, you have the following options:
 - **Search** - Select one of the items and then select **Search**.
 - **Edit** - Select one of the items and then select **Edit** to make changes.
 - **Delete** - Select one of the items and then select **Delete**.
 - **Delete All** - Select **Delete All** to clear the **Search History**.

Using Locks



When you unlock programming delivered by the **TV2** outputs to your in-home cabling system, you are allowing all TVs connected to your in-home cabling system to have access to this programming. In this case, you must rely on the V-Chip technology and settings in the individual TVs to prevent viewing of inappropriate programming. Consult your TV user's guides for instructions to set up V-Chip protection.

Note: Locks for programming on the **TV1** outputs for the nearby TV are set using the **TV1** menus. Locks for programming on the **TV2** outputs to remote TVs are set using the **TV2** menus. The section below applies to locks set by either **TV1** or **TV2** menus. Locks set for **TV1** programming are separate from locks set for **TV2** programming.

How to Set Locks: A Two Step Process

1. Create the locks that you want.
2. Lock the receiver.

When the receiver is locked, anyone who wants to access locked items must enter the password.

When You Have Locked the Receiver

- If you try to access a locked item or open the **Locks** menu, the receiver displays a message prompting you to enter the password.
- The receiver allows you three tries to enter the correct password. If you fail to enter the correct password, the receiver does not allow more tries for several minutes.
- If you enter the correct password, you can access the locked item or open the **Locks** menu.
- If you exit a locked item or close the **Locks** menu, you must enter the password to access the item.



The locks you set for **TV2** in **Dual Mode** are not available in **Single Mode**. When using the receiver in **Single Mode**, if the programming you select is not appropriate for all viewers on remote TV(s), be sure to disable **Shared View** (see page 51 for instructions).

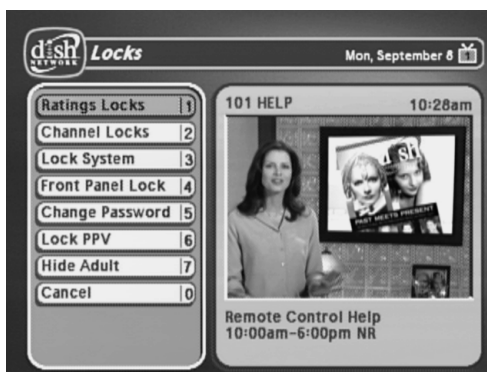
Locking and Unlocking the Receiver

You must lock the receiver for any receiver **Locks** you set to take effect. To lock the receiver, you must first create a password. If you forget your password, you will need to speak with a Customer Service Representative. If you have a Personal Identification Number (PIN), you will need to give it to the Customer Service Representative. See page 101 for information on PINs.

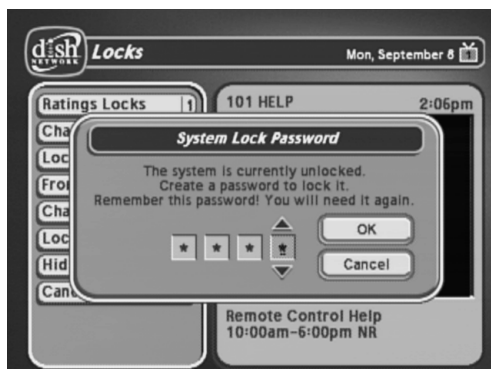
1. Press the **MENU** button to display the **Main Menu**.
2. Select the **Locks** option to display the **Locks** menu.

Note: If the receiver displays a message prompting you to enter a password, the receiver has already been locked.

Note: If you want to unlock the receiver or any specific lock, use the password for the TV output you're watching. For example, use TV1's password to unlock TV1's locks and TV2's password for TV2's locks.



3. Select the **Lock System** or **Unlock System** option. The receiver displays a message prompting you to enter a password to lock the system.

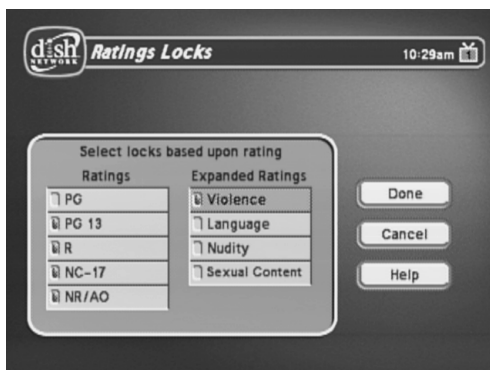


4. Enter and verify a password, using the **NUMBER PAD** buttons. The receiver displays stars (*) as you enter the digits of the password. When you enter the fourth digit of the password, the receiver highlights the **OK** option.
5. Memorize your password. From now on, you must enter this password to lock or unlock the receiver.
6. Select the **OK** option. Confirm the password by re-entering it. All the locks you have set are now in effect.

Creating or Changing Rating (Content) Code Locks

You can lock programs by rating. These locks apply to Pay-Per-View and DISH On Demand programs (when available), as well.

1. Press the **MENU** button.
2. Select the **Locks** option.
3. If the receiver is locked, enter the password using the number pad buttons. The receiver displays stars (*) as you enter the digits of the password. When you enter the fourth digit of the password, the receiver highlights the **OK** option. Press the **SELECT** button.
4. Select the **Ratings Locks** option.



5. Highlight the lowest rating that you want to block. Press the **SELECT** button to lock the highlighted rating.

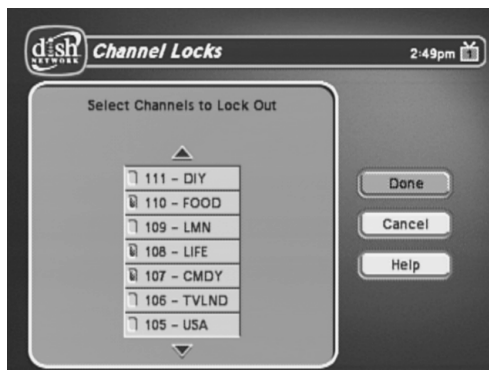
Note: All ratings that are more restrictive than the selected rating are also selected. For example, if you lock PG-13 rated programs, then all programs with the R, NC-17, and NR/AO ratings are also locked.

6. Select the expanded rating code(s), if you want to also lock these ratings.
7. To unlock a rating code, highlight the code and press **SELECT**.
8. Select the **Done** option to save the changes.
9. If the receiver is not locked, you must lock it to put the locks you just created into effect by selecting **Lock System**.

Creating or Changing Channel Locks

You can lock any channel, including Pay-Per-View channels.

1. Press the **MENU** button.
2. Select the **Locks** option.
3. If the receiver is locked, enter the password using the number pad buttons. The receiver displays stars (*) as you enter the digits of the password. When you enter the fourth digit of the password, the receiver highlights the **OK** option. Press the **SELECT** button.
4. Select the **Channel Locks** option.

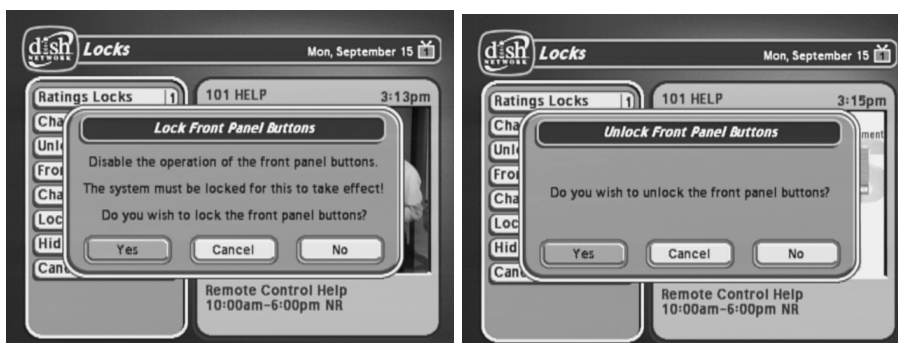


5. Highlight the channel that you want to lock. If necessary, press the **UP** or **DOWN ARROW** button to see the channel. You can also enter each channel number using the **NUMBER PAD** buttons.
6. Press the **SELECT** button to lock or unlock the highlighted channel. If the checkbox next to the channel has a checkmark, the channel is locked.
7. Select the **Done** option to save the changes.
8. If the receiver is not already locked, you must lock it to put the locks you just created into effect.

Locking and Unlocking the Receiver Front Panel (TV1 Only)

This keeps anyone from using the front panel buttons, but it does not lock the remote control buttons. This option is only available on TV1 menus.

1. Press the **MENU** button.
2. Select the **Locks** option.
3. If the receiver is locked, enter the password using the **NUMBER PAD** buttons. The receiver displays stars (*) as you enter the digits of the password. As soon as you enter the fourth digit of the password, the receiver highlights the **OK** option. Press the **SELECT** button.
4. Select the **Front Panel Lock** option to lock or unlock the front panel.



5. Select the **Yes** option.
6. To activate the front panel lock, you must lock the receiver.

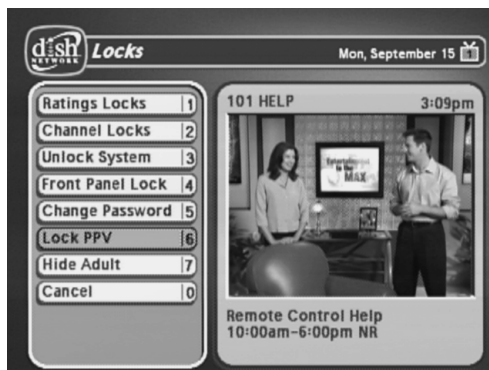
Locking and Unlocking Pay-Per-View Channels and DISH On Demand

This locks all Pay-Per-View channels and DISH On Demand (when available). You also can lock one or more Pay-Per-View channels by using channel locks or rating locks.

1. Press the **MENU** button.
2. Select the **Locks** option.
3. If the receiver is locked, enter the password using the **NUMBER PAD** buttons. The receiver displays stars (*) as you enter the digits of the password. As soon as you enter the fourth digit of the password, the receiver highlights the **OK** option. Press the **SELECT** button.

Tip: Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

4. Select the **Lock PPV** or **Unlock PPV** option.



5. If the receiver is not locked, you must lock it to put the lock you just created into effect.

Hiding and Showing Adult Channels

When you hide adult channels, you keep the **Program Guide**, **Themes** lists, and the **Browse Banner** from displaying adult channels. It also keeps anyone from choosing such channels by using the UP or DOWN ARROW buttons or the remote control NUMBER PAD buttons.

1. Press the MENU button.
2. Select the **Locks** option.
3. If the receiver is locked, enter the password using the NUMBER PAD buttons. The receiver displays stars (*) as you enter the digits of the password. As soon as you enter the fourth digit of the password, the receiver highlights the **OK** option. Press the SELECT button.
4. Select the **Hide Adult** or **Show Adult** option.

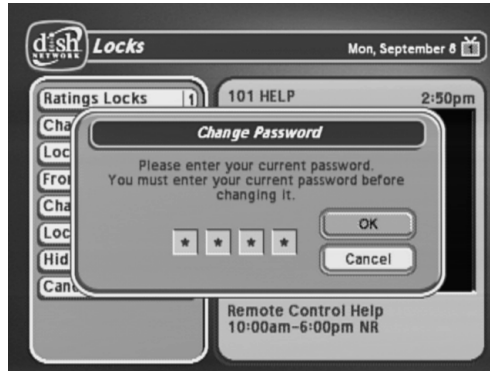


Changing the Receiver Password

1. Press the MENU button.
2. Select the **Locks** option.

If the receiver is locked, enter the password using the NUMBER PAD buttons. The receiver displays stars (*) as you enter the digits of the password. As soon as you enter the fourth digit of the password, the receiver

- highlights the **OK** option.
3. Press the **SELECT** button.
 4. Select the **Change Password** option.

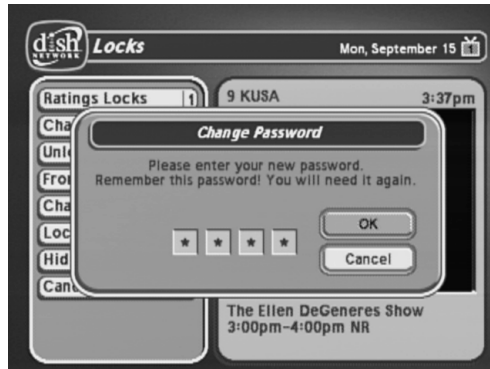


5. Enter the current password using the number pad buttons. As soon as you enter the fourth digit of the password, the receiver highlights the **OK** option.
6. Press the **SELECT** button.

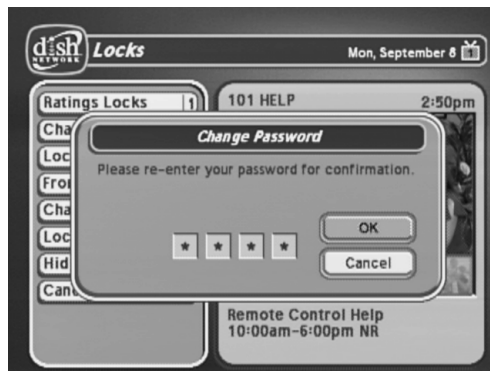
Chapter 3

Using the System

7. Enter the new password using the number pad buttons. As soon as you enter the fourth digit of the password, the receiver highlights the **OK**.



8. Select the **OK** option to change the password.
9. Enter the new password again for confirmation, using the **NUMBER PAD** buttons. The receiver displays stars (*) as you enter the digits of the password. As soon as you enter the fourth digit of the password, the receiver highlights the **OK** option. Press the **SELECT** button.



10. Memorize the new password. From now on, you must enter this password to lock or unlock the receiver.

Personal Identification Number

If you want to make sure that you are the only one who can make changes to your DISH Network account, you can assign a Personal Identification Number (PIN) for call-in requests. Call the Customer Service Center (1-800-333-DISH (3474)) at any time to set up the PIN. After the PIN is set up, anyone calling the Customer Service Center must provide this PIN to make any changes to your account. You will also be required to provide your PIN to the Customer Service Representative if you have forgotten the password set on your receiver.

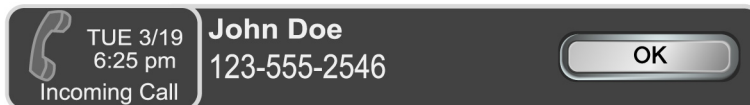
If you forget your PIN, the representative may ask for more information to make sure that you are authorized to make changes to your account.

Using Caller ID

Caller ID displays on your TV the names of people as they call you if you subscribe to **Caller ID** from your local phone company. To use this feature, make sure you have a phone line connected to the receiver and that the **Caller ID** feature is enabled. After you turn on **Caller ID**, it stays on until you decide to turn it off.

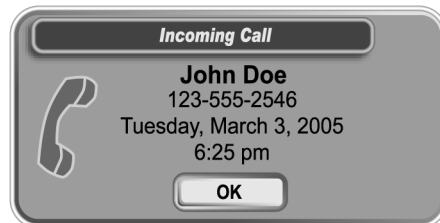
Caller ID Screens

When you receive a call, you will see a **Caller ID** popup screen.



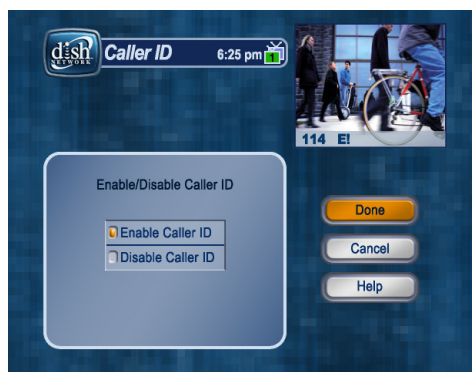
You can select **OK** to eliminate the message. If you do nothing, it will disappear after 20 seconds.

If you are in a menu when a call comes in, you will see a different **Caller ID** popup screen.



Turning Caller ID On and Off

1. Press **MENU** on the Remote Control.
2. Select **System Setup**.
3. Select **Installation**.
4. Select **Caller ID**.



5. Select **Enable Caller ID** or select **Disable Caller ID**.
6. Select **Done**.

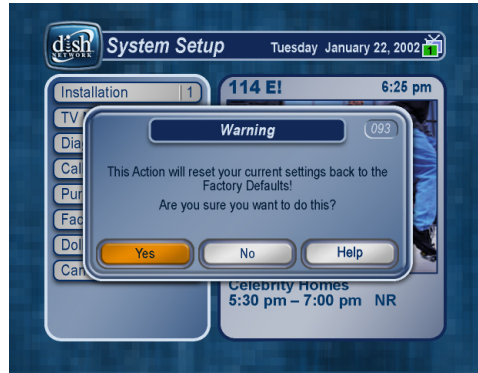
Resetting Receiver to Factory Default Settings

Note: Resetting the receiver to factory default settings discards all **Favorite Lists** except the **All Chan** and **All Sub** lists.

Note: If you have set any locks on the receiver, and the receiver is locked, these locks will be kept. If the receiver is unlocked, any such locks will be lost. You cannot reset the receiver to default settings to discard a password you have forgotten. Only a Customer Service Representative can reset the receiver to bypass a receiver lock.

If you want to reset the receiver to be the same as when it was shipped from the factory, do the following:

1. Press MENU-6-6.
2. When the receiver displays a **Warning** message, confirm that you want to reset the receiver's preferences by selecting **Yes**.



Changing Program Languages

You may be able to change the language of some programs. An alternate language may not be available for all programs. Some programs, such as movies, show at the start whether an alternate language is available. An alternate language applies only to the audio part of a program and does not change the language used in the menus displayed by the receiver.

1. Press the MENU button.
2. Select the **Preferences** option.
3. Select the **Alternate Audio** option.



4. Select the language you want in the **Languages** list.
5. Select the **Done** option to save your language choice. The receiver displays the **System Setup** menu.

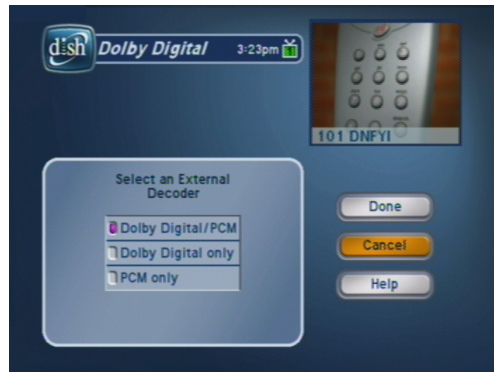
Using Dolby® Digital Sound

Dolby Digital gives you the capability to enjoy programs in surround sound. An external decoder is required to enjoy this feature. Refer to your decoder user's guide.

Note: Not all programs contain a Dolby Digital sound track.

The receiver uses an optical port for outputting digital audio. The optical output can provide two audio data types: Dolby Digital and Linear PCM (only Dolby Digital can provide full 5.1-channel sound).

1. Connect an external Dolby Digital decoder to the receiver's back panel Digital Audio Output using an optical cable (available at consumer electronics stores).
2. Press MENU-6-7 to open the **Dolby Digital** screen.

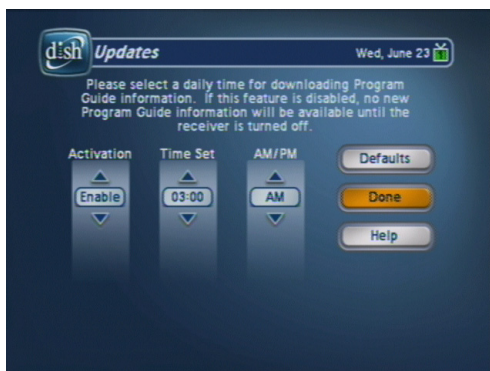


3. Select one of the following optical output options:
 - **Dolby Digital/PCM** - Select this option only if the stereo system or amplifier can decode both Dolby Digital and Linear PCM signals.
 - **Dolby Digital Only** - Select this option if the stereo system or amplifier can decode only Dolby Digital and will not process Linear PCM signals. See your amplifier's owner's manual for more details on the amplifier (and see the following table).
 - **PCM Only** - Select this option only if the stereo system or amplifier cannot decode Dolby Digital signals.
4. Select **Done**.

Updates

Your satellite receiver is set to turn itself off at 3:00 a.m. so that it can receive updates to the **Program Guide** and **DISH On Demand** (when available). To change the update time, complete the following:

1. Press the MENU-8-5 to open the **Updates** screen.



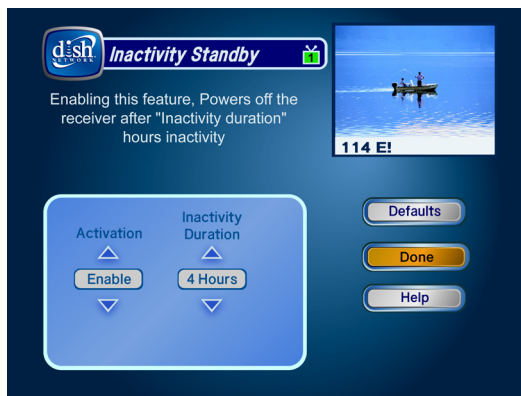
2. Highlight the **Activation** option.
3. Use the UP and DOWN ARROW buttons to select **Enable** or **Disable**.
Note: If you disable this feature, no new **Program Guide** or **DISH On Demand** information will be available until the receiver is turned off.
4. Highlight the **Time Set** option.
5. Use the NUMBER PAD buttons or the UP and DOWN ARROW buttons to set the time.
6. Highlight the **AM/PM** option.
7. Use the UP and DOWN ARROW buttons to select **AM** or **PM**.
8. Select **Done** to save the changes and exit this screen.

Note: You can reset the changes you have made to the **Updates** feature by selecting **Defaults** before exiting this screen.

Inactivity Standby

If your receiver is on for a preset period of time without any activity (for example, no channel changes), the **Inactivity Standby** feature turns off the receiver so that you'll always have the latest **Program Guide** and **DISH On Demand** (when available). Enabling this feature (recommended) also improves the reliability of your receiver. To change the settings for this feature, complete the following:

1. Press the MENU-8-8 to open the **Inactivity Standby** screen.



2. Highlight **Activation** and use the UP and DOWN ARROW buttons to switch between **Enabled** and **Disabled**.
3. Highlight **Inactivity Duration** and use the UP and DOWN ARROW buttons to select the amount of time the receiver waits before turning off.
4. Select **Done**.

Note: Select **Defaults** to reset the changes you've made to this feature.

Control Other Devices with the Remote Controls

Tip: Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

This section describes how to use Remote Control 1 or Remote Control 2 to control with a TV, a VCR, or other devices. For information on how to use the remote to control the receiver, see *Using the Remote Controls* on page 49. You can set up both remote controls to control the satellite TV receiver and up three other devices each. These devices can be a TV, a VCR or DVD player, and a third device.

Where the word *remote* is used in the following section, it applies to both Remote Control 1 and Remote Control 2.

Remote Control Modes

You can set the remote to four different modes to control the receiver or other devices. When you get the remote it's already set up to control the receiver. You must set up the remote to control a device like a TV or a VCR. See *Set Up the Remote to Control Other Devices*.

Use the remote control's mode buttons, **SAT** (satellite receiver), **TV** (for a TV), **VCR** (for a VCR or a DVD player), and **AUX** ("auxiliary," for a second TV, a second VCR, a DVD, a tuner, or an audio amplifier) to set the remote to the right mode for the device. To change the mode, press the button for the device you want the remote to control. The mode button lights for two seconds to show you've set the remote to that mode.

Limited Mode

You can program your remote control in limited mode to keep from accidentally changing the channel on your TV or VCR. When you use the remote to control your TV in limited mode, you will only be able to use the **POWER**, **MUTE**, and **VOLUME** buttons. Also, when you use the remote to control your VCR in limited mode, you will only be able to use the power and **VCR** function buttons. The section *Setting Up the Remote to Control Other Devices* has a step that tells the remote control to go into limited mode.

Set Up the Remotes to Control Other Devices

Over the next few pages we tell you how to use the remote to control a TV, a VCR, a DVD player, a tuner, or an amplifier.

To use the remote to control other devices, you must first program it to control these other devices. You can do this by either following the instructions in *Set Up the Remote Control* below, or the *Scan for Device Codes* procedure described on page 109.

If you are programming the remote to control a combination device, such as a TV/VCR or a VCR/DVD, program the remote control in one mode, and then repeat the procedure in the other mode. For example, to program the remote to control a TV/VCR using code 748: Follow the instructions to program the remote to control the TV using code 748, and then repeat the instructions for the VCR using the same code.

Set Up the Remote Control

Instructions	Additional Information
1. Turn the device on.	Use the device's front panel buttons or its remote control.
2. Find the brand name of the device in the tables starting on page 147.	If the brand isn't listed, see <i>Scan for Device Codes</i> on page 109.
3. Press and hold the mode button until all the other mode buttons light up, and then let go of the button.	For example, hold the TV mode button for a TV until all of the other mode buttons light. When you let go, the TV mode light will flash.
The mode button flashes.	

Tip: Limited mode is not used with audio amplifiers.

Instructions	Additional Information
If you are repeating this procedure to program a combination device, be sure to press the correct mode button (for example, if you have a TV/VCR combination and you have already programmed the remote to control the TV, press and hold the VCR mode button as described above).	
4. <i>For AUX mode only:</i> • Press 0 for a second TV. • Press 1 for a second VCR or DVD player. • Press 2 for a tuner or amplifier.	This step is for programming which kind of device that should be programmed in AUX mode. If you're not programming in AUX mode, skip to step 5.
5. Enter one of the three-digit device codes from the table using the number buttons.	The three-digit device code should be for the brand name of your device that you found in step 2.
6. If you want to program limited mode, press 1. If not, skip to step 7.	See <i>Limited Mode</i> for more information.
7. Press the POUND (#) button.	If you entered the code correctly, the mode button flashes three times.
8. Press the blank POWER button to turn off the device. If the device does not turn off, go to step 10.	If the code works, the device should turn off.
9. Turn the device back on and try some other buttons to make sure they work. If the code works for other buttons, stop here.	Sometimes the blank POWER button works when other buttons don't.
10. If the code doesn't work, redo steps 3 through 9 with another device code from the tables.	Try every code listed for you brand until one works for your device.
11. <i>For combination devices:</i> Repeat this procedure from step 3.	
12. If you can't find a code that works try <i>Scan for Device Codes</i> that follows.	

Scan for Device Codes

If the code for your device is not listed in the tables starting on page 147, use this procedure to scan the remote control's memory for the device code.

Instructions	Additional Information
1. Turn the device on.	Use the device's front panel buttons or its remote control.
2. Press and hold the mode button until all the other mode buttons light up, and then let go of the button. The mode button flashes.	For example, hold the TV mode button for a TV until all of the other mode buttons light. When you let go, the TV mode light will flash.
3. <i>For AUX mode only.</i> • Press 0 for a second TV. • Press 1 for a second VCR or DVD player. • Press 2 for a tuner or amplifier.	This step is for programming which kind of device that should be programmed in AUX mode. If you're not programming in AUX mode, skip to step 4.
4. <i>For AUX mode only:</i> Press the STAR button.	
5. Press the blank POWER button.	This puts your remote in the scan mode.
6. Press the UP or DOWN ARROW button repeatedly until the device turns off.	As you press the UP or DOWN ARROW button, the remote is trying each code in the memory to see if it can turn off your device. When the device turns off, you have found a code that might work. Note: The mode button for the device will flash rapidly eight times when you've scanned all the codes for that device.
7. Press the POUND (#) button.	This stores the code you found.

Tip: In Dual Mode, Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

Instructions	Additional Information
8. Turn the device back on and try some other buttons to make sure they work.	Press the blank POWER button to turn the device back on. Try some other buttons to make sure they work. Sometimes, the blank POWER button works when other buttons don't.
9. Repeat this procedure until you've tried all the codes.	You may need to repeat the scan to find the best code for your device.

Check the Device Codes

You can find out what device code you've set for each remote control mode.

Instructions	Additional Information
1. Press and hold the mode button until all the other mode buttons light up, and then let go of the button. The mode button flashes.	For example, hold the TV mode button for a TV until all of the other mode buttons light. When you let go, the TV mode light will flash.
2. Press the POUND (#) button twice. Watch the mode light to determine your code. The mode button flashes the number for each digit of the device code, with a pause between the groups of flashes. A quick flash is for zero. For AUX mode: The first group of flashes tells you what the AUX mode controls. A quick flash (zero) before the three-digit code is for a TV; one regular flash is for a VCR or DVD player; and two flashes is for a tuner or amplifier. For Limited Mode: If you have programmed a TV or VCR in Limited Mode, the mode button flashes once at the end of the flash sequence.	For example, if the code is 570, the mode button flashes five times, pauses, flashes seven times, pauses, and flashes once quickly. For example, if the TV code is 570, the AUX mode button flashes once quickly (indicating 0 for TV), pauses, flashes five times, pauses, flashes seven times, pauses, and flashes once quickly. For example, if the TV code is 570, the AUX mode button flashes once quickly (indicating 0 for TV), pauses, flashes five times, pauses, flashes seven times, pauses, flashes once quickly, and then flashes once (indicating Limited Mode).

Remote Control Buttons

Control the Receiver

When you get the remote, it's already set up to control the receiver. However, you must set up the remote to control the TV before you can use the MUTE and VOLUME buttons.

For information on the remote buttons that control the receiver, see *Using the Remote Controls* on page 49.

Control a TV (or a Second TV)

Only the buttons described here control a TV. Some of the buttons described here may not control your TV. Please see your TV user's manual for information about the TV's features.

TV Mode Button

You must first set up the remote to control the TV. See *Set Up the Remote to Control Other Devices*, beginning on page 107. Then, you must press the TV mode button to set the remote to TV mode. The TV mode button lights for two seconds to show you've set the remote to TV mode. Make sure you keep the remote in TV mode to use the buttons described here.

Note: You can set up the remote to control a second TV in AUX mode, the same way it controls the first TV in TV mode. See *Set Up the Remote to Control Devices* beginning on page 107.

TV/Video Button

If the TV has video input options, use this button to switch the TV video input.

Power Button

Press the TV POWER button to turn the TV on or off.

Mute Button

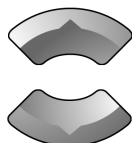
Press the MUTE button to turn the TV sound on or off.

Tip: If some of the buttons on the remote control do not control your TV and you have programmed try other codes. See page 107 for details.



Volume Button

Press this button to raise (+) or lower (-) the TV sound volume.



Up and Down Arrow Buttons

Use the UP and DOWN ARROW buttons to change channels on the TV.

Note: These buttons do not change the channels on the TV if the remote control is in limited mode.



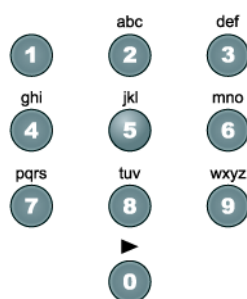
Select Button

The SELECT button works as the ENTER button for a TV.



Recall Button

Press the RECALL button to go back to the last TV channel you watched. Press it again to switch between the last two TV channels you watched.



Number Buttons

Use the NUMBER buttons to directly enter a different channel.

Note: These buttons do not change the channels on the TV if the remote control is in limited mode.

Control a VCR (or a Second VCR or a DVD Player)

Only the buttons described here control a VCR or DVD player. Some of the buttons described here may not control your VCR or DVD player. See the user's manual that came with your VCR or DVD player for information about the features.



VCR Mode Button

You *must first* set up the remote to control the VCR. See *Set Up the Remote to Control Devices*, beginning on page 107. Then, you must press the VCR mode button to set the remote to VCR mode. The VCR mode button lights for two seconds to show you've set the remote to VCR mode. Make sure you keep the remote in VCR mode to use the buttons described here.

Note: You can set up the remote to control a second VCR in AUX mode, the same way it controls the first VCR in VCR mode. See *Set Up the Remote to Control Devices* beginning on page 107.

Note: You *must* set the remote to VCR mode to set it up to control a DVD player. Once you do this, you *must* set the remote to VCR mode to control a DVD player.

TV/VIDEO



TV/Video Button

Use the TV/VIDEO button to switch the VCR between its TV mode and its VCR mode (see your VCR user's manual for information).

POWER



Power Button

Press the blank POWER button to turn the VCR on or off.

PAGE



Page Up and Down Arrow Buttons

Use the PAGE UP and DOWN ARROW buttons to change channels on the VCR.

Note: If you are using the remote control in limited mode, the VCR will not change channels.



Recall Button

Press the RECALL button to go back to the last VCR channel you used. Press it again to switch between the last two VCR channels you used.

VCR Buttons

- Press the **BACK** button to rewind a videotape.
- Press the **PAUSE** button to pause a videotape. Press this button or the **PLAY** button to go back to playing the tape.
- Press the **FWD** button to forward a videotape.
- Press the **STOP** button to stop playing or recording on a videotape.
- Press the **RECORD** button to record on a videotape.
- Press the **PLAY** button to play or to go back to playing a videotape.



BACK



PAUSE



FWD



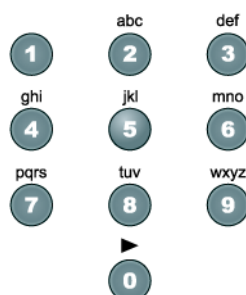
STOP



RECORD



PLAY



Number Buttons

Use the **NUMBER** buttons to enter channel numbers.

Note: If you are using the remote control in limited mode, the VCR will not change channels.

Control a Tuner or Amplifier

Only the buttons described here control a tuner or amplifier. Some of the buttons described here may *not* control your tuner or amplifier. Please see the user's manual that came with your tuner or amplifier for more information.



AUX Mode Button

You *must* first set up the remote to control the device. See *Set Up the Remote to Control Devices*, beginning on page 107. Then, you *must* press the **AUX** mode button to set the remote to AUX mode. The **AUX** mode button flashes once to show you've set the remote to AUX mode. Make sure you keep the remote in AUX mode to use the buttons described here.



Power Button

Press the blank **POWER** button to turn the tuner or amplifier on or off.



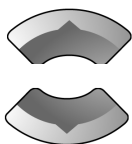
Mute Button

Press the **MUTE** button to turn the sound off or on.



Volume Button

Press the **VOLUME** button to raise (+) or lower (-) the volume.



Up and Down Arrow Buttons

Use **UP** and **DOWN ARROW** buttons to change channels on the tuner or amplifier.



Select Button

The **SELECT** button works as the **INPUT SELECT** button for the tuner or amplifier.

Other Remote Control Features

Switch Between TV and AUX Device Volume Control

When you set up the remote to control a TV, the mute and volume buttons control the TV volume. However, if you want to use the **AUX** mode to control a tuner or amplifier and the device has a volume setting, you can set up the remote to control the device's volume instead of the TV volume.

To set the remote to control the device's volume:

1. Press and hold the **AUX** mode button for three seconds, and then release it. The **AUX** mode button will blink.



2. Press the **POUND (#)** button.



3. Press the plus (+) side of the **VOLUME** button.



4. Press the **0** number button.



5. Press the **POUND (#)** button.
The **AUX** mode button flashes three times.



6. Press the **SAT** mode button.



7. Press the plus (+) and minus (-) sides of the **VOLUME** button.
The device's volume changes and the **AUX** mode button lights instead of the **TV** mode button.



To set the remote back to control the TV volume:

1. Press and hold the **TV** mode button for three seconds, and then release it. The **TV** mode button will blink.



2. Press the **POUND (#)** button.



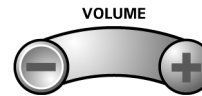
3. Press the plus (+) side of the **VOLUME** button.



4. Press the **0** number button.



5. Press the **POUND (#)** button.
The TV mode button flashes three times.
6. Press the **SAT** mode button.
7. Press the plus (+) and minus (-) sides of the **VOLUME** button.
The TV's volume changes and the TV mode button lights instead of the **AUX** mode button.



Using Troubleshooting Tools

Your receiver has diagnostics tools that a Customer Service Representative may ask you to use if you should ever run into problems while using your equipment. Even though these tools are quite helpful, it is recommended that you only use them when on the phone with a DISH Network representative.

Resetting Your Receiver

Reset your receiver as directed by the Customer Service Representative as follows:

1. Press and hold the front panel **POWER** button until only the green **TV1** indicator is lit.
2. Let go of the front panel **POWER** button.

It will take a few minutes for your receiver to reset and come back on. When you reset your receiver, your receiver may have to download an updated Program Guide. If this is the case, it may take longer for the receiver to come back on.

Diagnostics

The Customer Service Representative may ask you to open the **Diagnostics** screen. Remember to have an active phone line connected to your receiver.

1. Press **MENU-6-3**.

The **Diagnostics** screen shows you various tests the Customer Service Representative may ask you to perform on your receiver:

- **Connection** - Tests for a valid receiver phone connection.
- **Dial Out** - If **No Dial Out Pending** is displayed, the receiver does not need to have its smart card records updated.
- **Counters** - Shows you a list of diagnostic counters. Use **PAGE UP** and **PAGE DOWN** to scroll through the list of counters displayed.

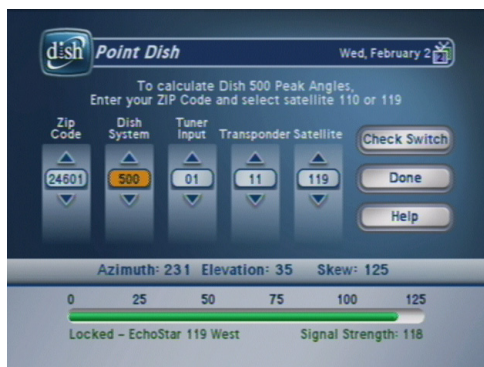
Note: If you have the receiver connected to a DSL (Digital Subscriber Line) phone line, it may cause this test to fail. If so, you will need to install a DSL filter between the receiver and the phone jack on the wall. You should be able to get a DSL filter from your DSL provider, or your local electronic parts store.

2. Select **Done**.

Point Dish and Check Switch

The **Point Dish** and **Check Switch** screens are helpful to the Customer Service Representatives. You may be asked to display these screens when you call DISH Network.

1. Press MENU-6-1-1 to open the **Point Dish** screen. This screen shows you information to help maximize your satellite signal. The bar at the bottom of the screen tells you the signal strength. Green is a good signal, while red indicates the signal is not acceptable or is from the wrong satellite.



2. Select **Check Switch** to display the **Installation Summary** screen. The Installation Summary screen tells you if you are receiver signals from the satellites and which multi-dish switches you have installed, if any.



Do not change any settings on the Check Switch screen unless specifically directed to by a Customer Service Representative.



3. Select **Test** only if directed by the Customer Service Representative.
4. Select **Done**.

Chapter 4

Dish Antenna Installation

These instructions guide you through the installation of a satellite system which includes your receiver (included with this manual), and a DISH Pro DISH 500 antenna system that can be identified by the DISH Pro logo shown below.



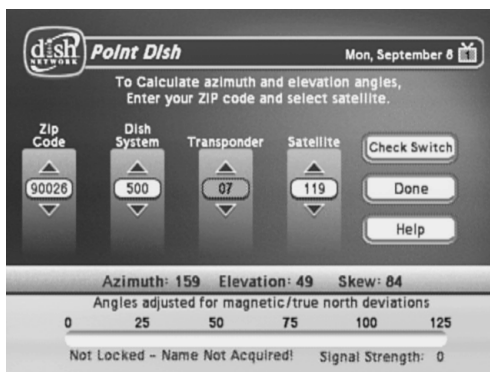
Installing a DISH 500 Antenna

The first step in installing your dish antenna is to assemble the satellite dish, mount it, and point it in the general direction of a satellite. To do this, follow these instructions:

Finding the Satellites

You need to find the satellites in the sky. To do this, you need to know the azimuth angle (the south, southeast, or southwest direction to the satellites) and the elevation angle (the angle up to the satellites) from your location, and the skew angle.

1. Make sure that the batteries are fresh in both remote controls, and are installed properly. If needed, make sure that the remote is in **SAT** mode to control the satellite receiver.
2. Make sure your satellite receiver is connected to your TV(s) and confirm that the remote controls are controlling the menus properly using the instructions in *Chapter 2*. Turn ON the television and receiver.
3. Display the **Point Dish** menu on the nearby TV by pressing **MENU** and then **6-1-1** using Remote Control 1 (unless your TV already displays this menu).



4. Enter your ZIP code in the **ZIP Code** field.
5. Make sure that **500** is shown under **Dish System**.
6. The menu displays the azimuth, elevation, and skew angles. Write down these numbers in the blanks provided in the margin.

Tip: Remote Control 1 is used to control TV1 menus on the nearby TV. Remote Control 2 is used to control TV2 menus on the remote TV(s).

Azimuth: _____

Elevation: _____

Skew: _____

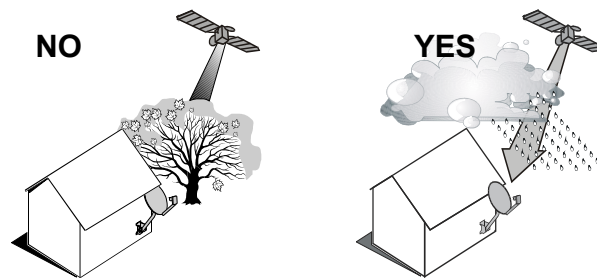
Dish Antenna Installation

Mounting the Dish

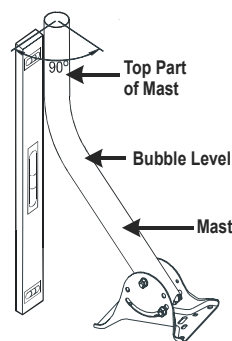
1. Using the azimuth and elevation angles, find a location for the satellite dish which can be pointed towards the satellites located at these angles. With a compass, find the required azimuth angle. Then, use the elevation angle to find out how high the satellites are in the sky from your location.

Make sure nothing blocks the line of sight between the dish and the satellites.

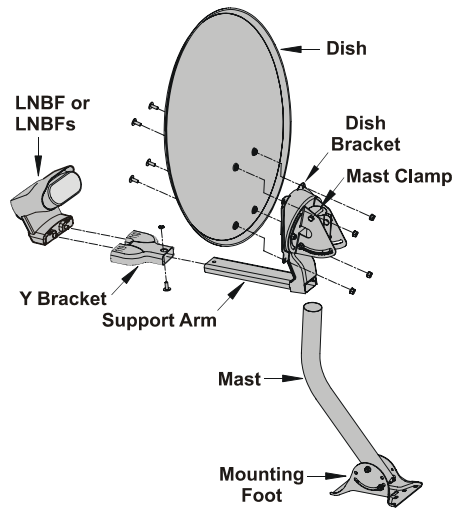
2. Mount the mast to a solid surface so that the dish antenna cannot move or be bumped out of adjustment. Keep in mind that physical and environmental conditions can block your satellite dish's ability to receive a clear satellite signal. The conditions to be aware of are: Eaves and overhangs on your building or house, wind, plant growth, and deterioration of the mounting surface. Never mount to a tree or a public utility pole.



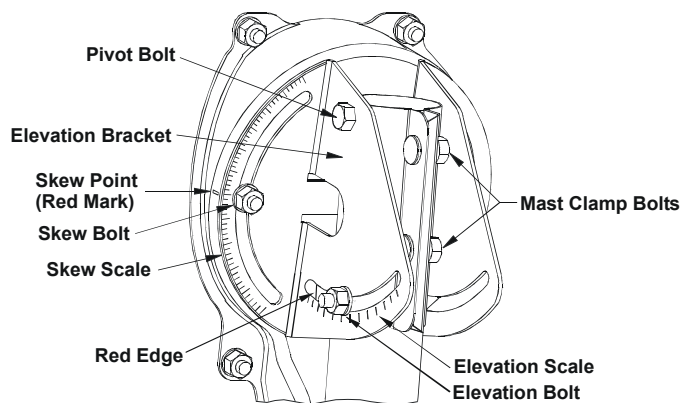
3. Align the top part of the mast so that it is absolutely vertical, as shown below. If the top part of the mast is off vertical by only a few degrees, it will be difficult or maybe even impossible for you to find the satellites. Take at least two readings with a bubble level, on the upper mast, that are 90 degrees apart from one another.



4. Assemble the satellite dish as shown below, except do not attach the Y-bracket or LNBF at this time.



5. Loosen both skew bolts and set the skew by rotating the dish mounting bracket to align the red mark with the required angle on the skew scale which you wrote down on page 119. Tighten the skew bolts securely to keep the dish from rotating. **Once the skew is set, do not try to fine-tune this angle when aiming the dish.**

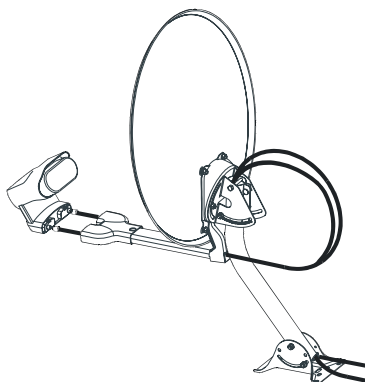


6. Set the elevation by tilting the dish mounting bracket to align the red edge with the required angle from page 119 on the elevation scale. Tighten the elevation bolts, but *do not* tighten the pivot bolt at this time.
7. Slide the dish assembly down onto the mast. Make sure the pivot bolt rests on the top of the mast. Turn the dish assembly so that it points in the general direction of the satellites, using the azimuth angle from page 119.
8. Thread two RG-6 coaxial cables through the mast, support arm, and the Y-bracket. These cables should be long enough to run from your receiver to your LNBF.

Note: See *Running Coaxial Cables* on page 133 for cable installation guidance.

Dish Antenna Installation

Note: You can have as much as 200 feet of cable between the DISH Pro LNBF and the DISH Pro receiver. However, you must use only RG-6 coaxial cables rated for 950 to 2150 MHz. Some cables may say "Swept tested for 2150 MHz." If you have any doubt about this, ask your DISH Network retailer, examine the cable's outer jacket, or look on the container the cable came in. Do not use cable company TV cables or cables from other satellite TV systems not rated for 950-2150 MHz. These other cables may cause signal loss. Do not use existing cables such as RG-59. Also, be sure that any outdoor connections are made using waterproof F-connectors.

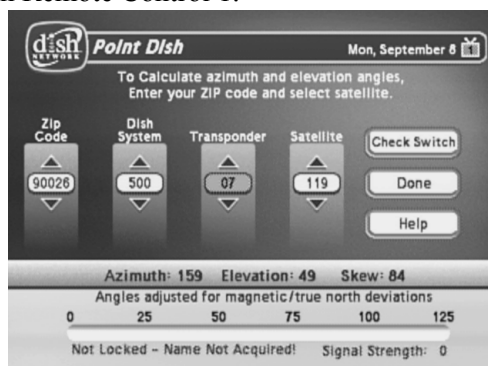


9. Attach the Y-bracket, using the Y-bracket screw.
10. Connect the RG-6 cables from the two **SATELLITE IN** connections on the back of the receiver *directly to the two ports* of the DISH Pro Twin LNBF, as shown below. Be sure there are no multi-dish switches between the LNBF and the receiver.



Tighten all of the coaxial cable connections *only* by hand. If you use a wrench, you may over-tighten the connections and damage your equipment. Such damage is *not* covered by the limited warranty.

11. Attach the LNBF to the Y-bracket using the two LNBF screws.
12. You should see the **Point Dish** menu on your nearby TV. If not press **MENU** and then **6-1-1** on Remote Control 1.



13. Select **Check Switch**. The **Check Switch** screen will open.
14. Select **Retest**. The receiver shows you a message that it is checking the system.

15. When the check switch procedure finishes, you will see an **Installation Summary** screen similar to the one below. The information for **Satellite Input 1** and **Satellite Input 2** should be the same:
- **Satellite** - **X** twice.
 - **Transponder** - **X** twice. This is OK and does not indicate a problem with the receiver.
 - **Device Type** - **Twin** twice. This indicates that your receiver has confirmed the connection with your DISH Pro Twin LNB is working.

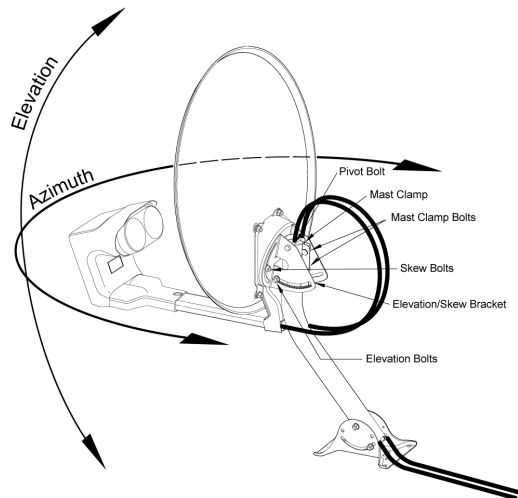


16. Select **OK** to return to the **Point Dish** screen.
17. Make sure the screen shows **119** under **Satellite**. If not, move the highlight to **119** and press either the **UP** or **DOWN ARROW**.

Note: The signal strength bar is used to help you aim the dish by showing the strength of the signal you are receiving. Look at the signal strength bar while you aim the dish.

Note: Don't stand in front of the dish while you aim it, because your body will block the satellite signal. After you adjust the aim, let go of the dish so that you can get a good signal reading after the dish settles back in place by itself.

18. Turn the dish back and forth **very slowly**, until the signal strength bar turns **green**. This shows you've found the signal.

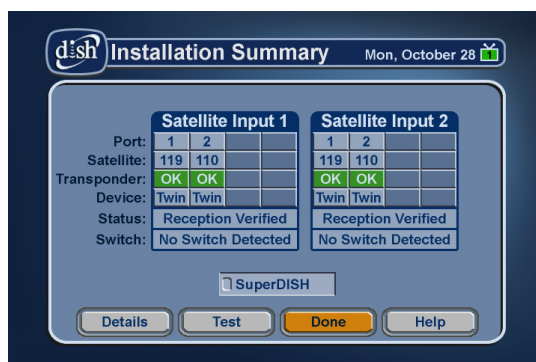


Tip: Have one person aim the dish while another watches the signal strength or listens to the signal tone.

Dish Antenna Installation

Note: If you cannot find the signal, turn the dish back to the first azimuth angle. Then, loosen both elevation bolts *just enough* so you can tilt the dish. Tilt the dish elevation up by two degrees, and then tighten both bolts. Now, turn the dish back and forth again. *If you still can't find the signal*, tilt the dish up again *very slightly* and turn the dish back and forth until you find the signal. **Do not change the skew setting.**

19. When the signal strength bar is *green*, turn the dish back and forth *just a little*, to where the signal strength bar shows the strongest signal. When you find the strongest signal, tighten both mast clamp bolts. Then loosen both elevation bolts, *just enough* so you can tilt the dish. Tilt the dish up and down *just a little*, to where the signal strength bar shows the strongest signal. When you find the strongest signal, tighten all bolts in the dish assembly so the dish cannot be moved.
20. You are now ready to verify reception from both satellites. Select the **Check Switch** option. When the **Check Switch** menu opens, select **Retest**. The receiver shows you a message that it is checking the system. When the procedure is finished, you will see an **Installation Summary** screen. This screen may look different than the one shown below.
 - **Satellite - 119 in Port 1 and 110 in Port 2.**
 - **Transponder - All** twice. This is OK and does not indicate a problem with the receiver.
 - **Device Type - Twin** twice. This indicates that your receiver has confirmed the connection with your DISH Pro Twin LNB is working. Press OK to exit this menu.”
 - **Status - Satellite reception verified.**



21. If you do not see **110** under **Port 2**:
 - Make sure the skew angle you wrote down on page 119 is exactly the same as the skew angle you set in step 5 on page 121. If it is not, reset the skew angle as described on page 121. After you reset the skew angle, go back page 123 and start over from step 16.
 - If **119** is shown under **Port 2**, move the dish approximately 9° to the east and restart the procedure at step 12.
22. Look at the **Point Dish** menu. If you have good signal strength with **119** is indicated by a green signal bar, select **110**. If you have good signal strength on **110**, go to step 23.

If you do not have good signal strength with **110**, go back to step 18, and fine-tune the dish but with **110** selected instead of **119**. While the **110** and **119** signals will not be equal, you should be able to fine-tune the dish until you have the strongest possible signal from both satellites.

23. Select **Cancel** to exit the **Point Dish** menu. An **Attention** screen will open asking the mounting and positioning of your dish is complete with a **Locked** indication in the **Point Dish** screen. If the answer is yes, select **Yes**.

*If the answer is **No**, you will need to repoint your dish following the preceding steps until the mounting and positioning is complete and you do have the **Locked** indication.*

24. After you select **Yes**, the receiver will begin taking a software upgrade. You will see a **Warning** that **Vital program information will now be downloaded into your receiver**. You will also see a status bar showing the progress of this upgrade.

Once the software upgrade is complete, you will see a message that your receiver's memory is being upgraded.

Do not disturb the receiver while the receiver's memory is being upgraded.

25. When the memory upgrade is complete, you should be watching TV. Your dish antenna installation is now complete.

Note: If you are installing other DISH Pro or DISH Pro Plus receivers, be sure to run **Check Switch** on all of them, and allow them to take the necessary software upgrade.

Installing a Multiple Dish DISH Pro System

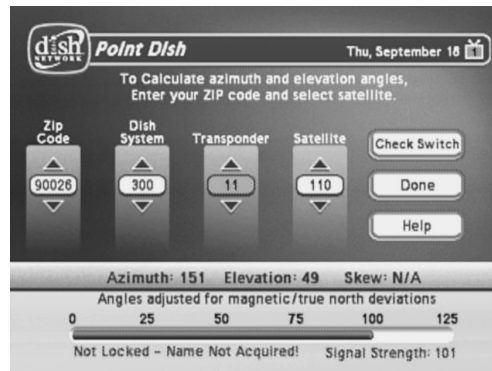
Note: You cannot use DISH Pro LNBFs and switches (those marked with the DISH Pro logo) with Legacy switches and LNBFs (those without the DISH Pro logo). You must install your DISH antenna system with either all DISH Pro LNBFs and switches or all Legacy LNBFs and switches. If you mix the two, the system will not work.

Note: You can have as much as 200 feet of cable between the DISH Pro LNBF and the DISH Pro receiver. However, you must use only RG-6 coaxial cables rated for 950 to 2150 MHz. Some cables may say "Swept tested for 2150 MHz." If you have any doubt about this, ask your DISH retailer, examine the cable's outer jacket, or look on the container the cable came in. Do not use cable company TV cables or cables from other satellite TV systems not rated for 950-2150 MHz. These other cables may cause signal loss. Do not use existing cables such as RG-59. Also, be sure that any outdoor connections are made using waterproof F-connectors.

Once you have installed the DISH 500 with its DISH Pro Twin LNBF using the preceding instructions, you can add a single satellite dish with a DISH Pro LNBF and switch as follows:

1. Turn on the television and the receiver if they are not already on. You should see the **Point Dish** screen. If not, open the **Main Menu** and press 6-1-1 on the remote.

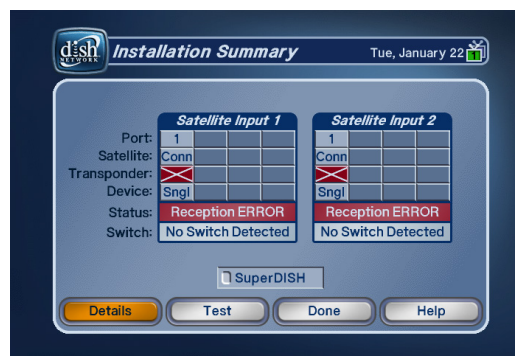
Dish Antenna Installation



Azimuth: _____

Elevation: _____

2. Select the satellite your dish will be pointed toward.
3. Select **300** under the **Dish System**.
4. Use the number buttons on the remote to enter your ZIP code to get the necessary azimuth and elevation. Write these numbers down in the spaces provided in the margin.
5. Mount the dish antenna and multi-dish switches following the mounting instructions that came with them and the *DISH Pro Wiring Diagrams* starting on page 128.
6. Connect two RG-6 cables from both **SATELLITE IN** connections on the receiver to two available ports on the switch(es).
7. Connect the LNB on the dish antenna to LNB port 1 on the switch(es) using RG-6 cable.
8. Select **Check Switch** from the **Point Dish** menu. When the **Check Switch** screen opens, select **Retest**.
9. When **Check Switch** is complete, you will see an **Installation Summary** screen similar to the one shown next. It will show a connection ("Conn" next to satellite) and **Single** device under **1** (Dish Input). It may also show an **X** on the Transponder line. This is okay and does not mean there is a problem with the system.



10. Press **CANCEL** to exit back to the **Point Dish** menu.
11. Point the dish for the strongest possible signal, following the instructions that came with it.

12. Connect two RG-6 cables between both ports on your DISH Pro Twin LNB and your switch(es) using the switch instructions and the *DISH Pro Wiring Diagrams* that start on page 128.
13. Select **Check Switch** from the **Point Dish** menu. When the **Check Switch** menu opens, select **Retest**. When the procedure completes, you will see the **Installation Summary** screen again. This time you should see confirmation for all satellites your dishes are pointed at, and “Satellite reception verified.” You should also see that the switch(es) in your system has been correctly identified.

Refer to the DISH Pro wiring diagrams for examples of installation summary screens.

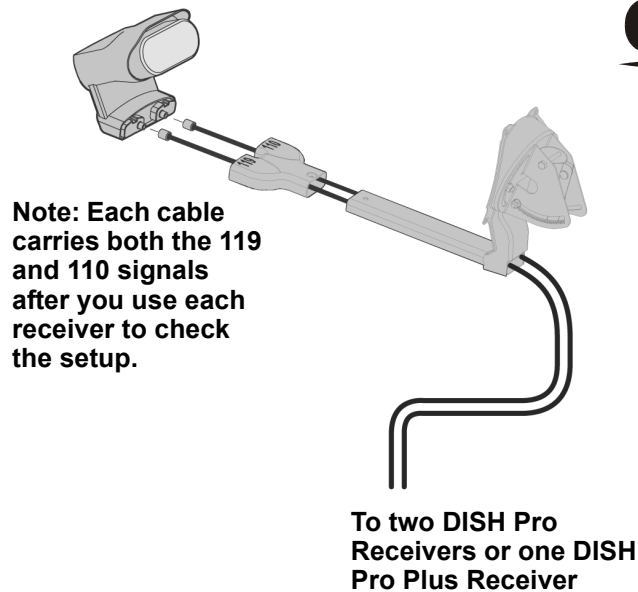
14. Press **CANCEL** to exit this menu, and then **Done** to exit the **Point Dish** screen. If you have any other receivers in your system, make sure you run **Check Switch** on each of them, and allow each to take the software upgrade, as needed.

DISH Pro Wiring Diagrams

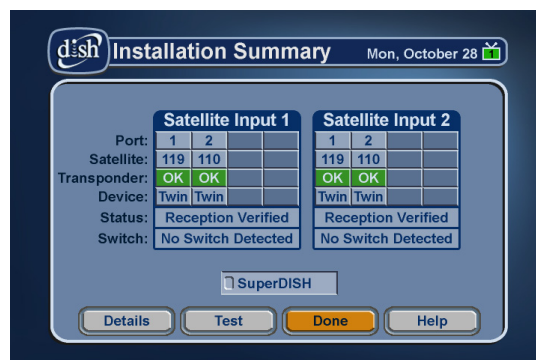
DISH 500, One DISH Pro Twin LNBF



This diagram leaves out grounding to be clear. Make sure you ground the system per the *National Electrical Code* (NEC) and all local electrical codes.



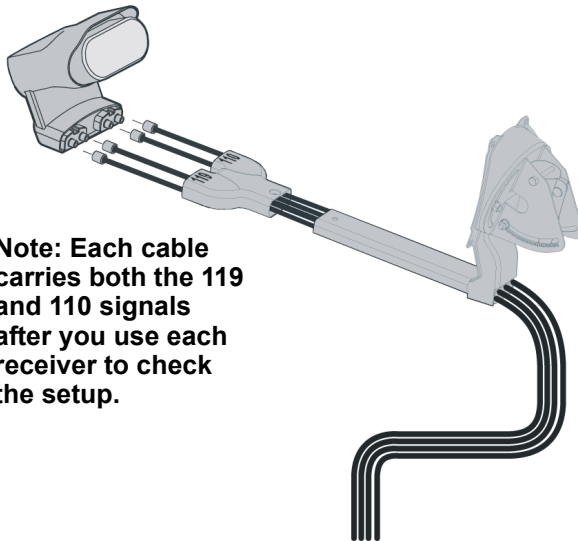
When you set up your system following this diagram and run **Check Switch** the **Installation Summary** screen should look similar to the one shown below.



DISH 500, One DISH Pro Quad LNBF



This diagram leaves out grounding to be clear. Make sure you ground the system per the *National Electrical Code* (NEC) and all local electrical codes.

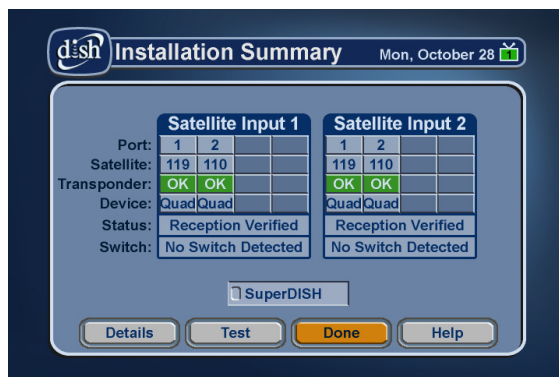


Note: Each cable carries both the 119 and 110 signals after you use each receiver to check the setup.

To four DISH Pro Receivers or two DISH Pro Plus Receivers



When you set up your system following this diagram and run **Check Switch** the **Installation Summary** screen should look similar to the one shown below.

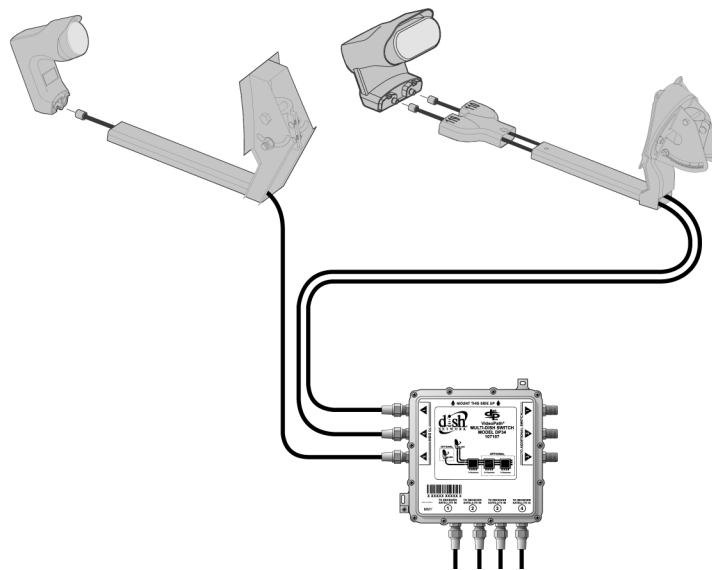


Dish Antenna Installation

DISH 500 with a DISH Pro Twin LNBF, One Dish with a DISH Pro LNBF, DP34 Switch

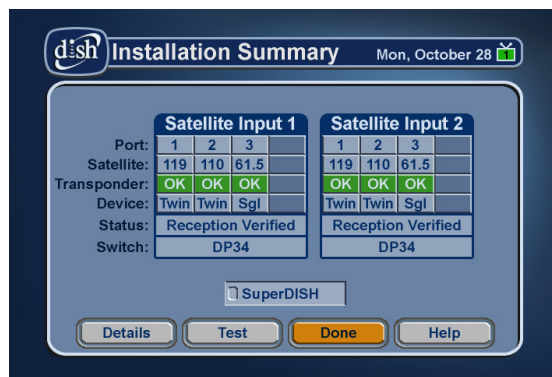


This diagram leaves out grounding to be clear. Make sure you ground the system per the *National Electrical Code* (NEC) and all local electrical codes.



To four DISH Pro
Receivers or two DISH
Pro Plus Receivers

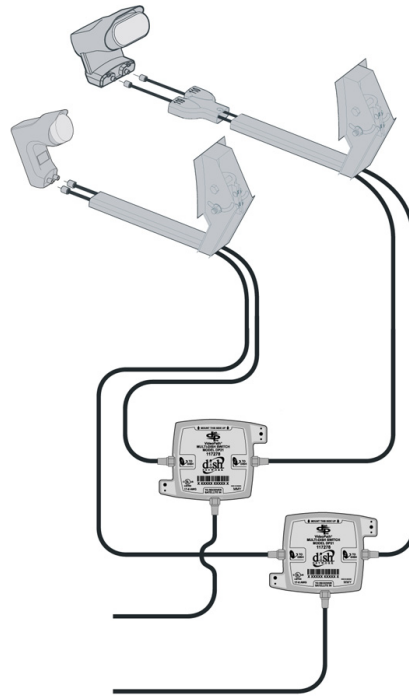
When you set up your system following this diagram and run **Check Switch** the **Installation Summary** screen should look similar to the one shown below.



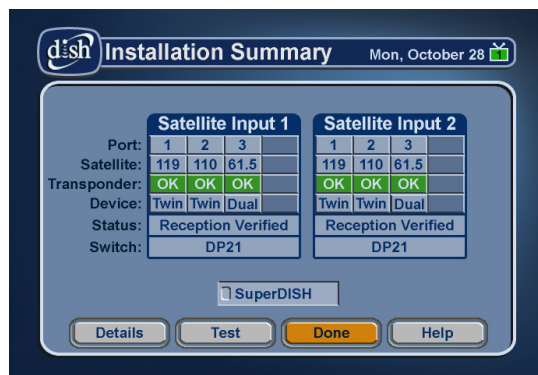
One DISH 500 with a DISH Pro Twin LNBF, One Dish Antenna with a DISH Pro Dual LNBF, and Two DISH Pro 21 Switches



This diagram leaves out grounding to be clear. Make sure you ground the system per the *National Electrical Code* (NEC) and all local electrical codes.



When you set up your system following this diagram and run **Check Switch** the **Installation Summary** screen should look similar to the one shown below.

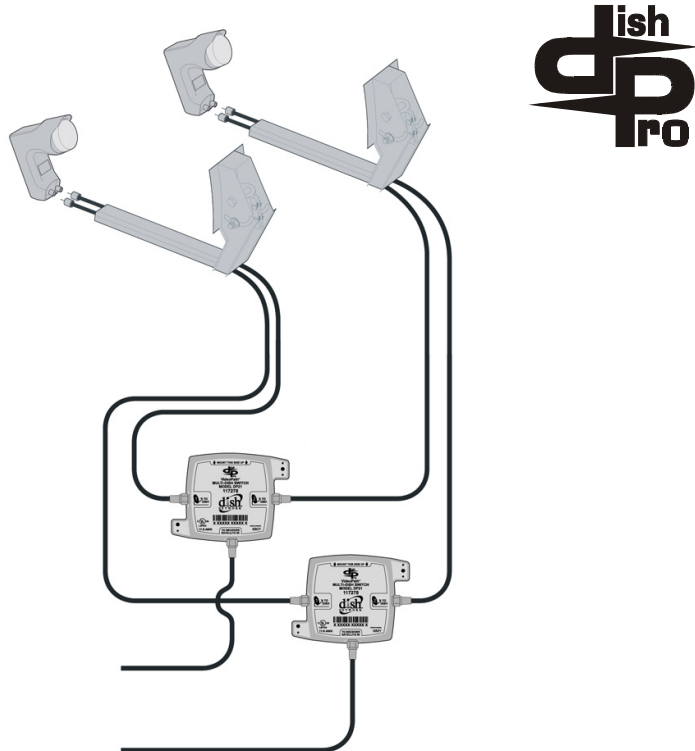


Dish Antenna Installation

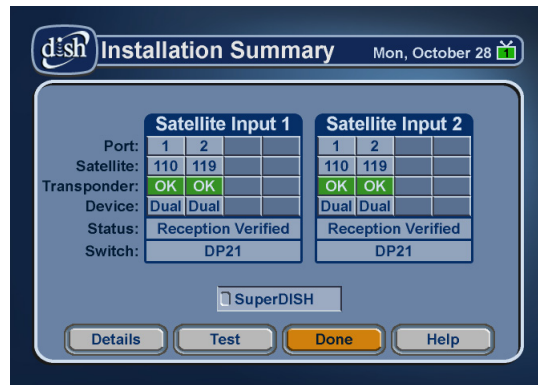
Two Dish Antennas, Two DISH Pro Dual LNBs, and Two DISH Pro 21 Switches



This diagram leaves out grounding to be clear. Make sure you ground the system per the *National Electrical Code* (NEC) and all local electrical codes.



When you set up your system following this diagram and run **Check Switch** the **Installation Summary** screen should look similar to the one shown below.



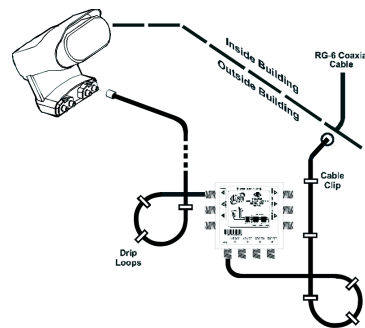
Running Coaxial Cable

1. Using the shortest path possible, run the coaxial cable(s) from the ground block or switch to the satellite receiver(s). Do *not* kink or pinch any cable. Cables should be bent *only* in gentle curves.



Do *not* use a longer cable between the satellite dish and the receiver than is specified in the DISH Pro or Legacy system installation instructions. If your system requires more cable than the limit specified in these installation instructions, you should consider having the system professionally installed.

2. Put a drip loop in each cable at a point before it enters the building. A drip loop allows moisture to drip from the cable before it runs into the building or any outside connection (for example, a multi-dish switch).



FOR EXAMPLE ONLY



Before drilling any holes in the wall or roof of your building, make sure that there are no wires or pipes in the area of the holes. If you are not comfortable doing this, contact a professional in your area. Make sure that you follow all safety instructions and building codes.

3. Locate each receiver inside the building, against or near an outside wall. Then drill a hole through the outer wall to pass a cable inside the building. If a receiver is located in an interior room, run a cable through the outside wall, and into an attic, basement, or crawl space in order to reach the receiver.
4. Seal all holes that you drill in the building with silicone or other weather-proof sealant after installation. Once each cable is inside the building, you may attach it to a wall receptacle or directly to a receiver.



Tighten the back panel coaxial cable connections *only* by hand. Using a wrench may over-tighten the connections, causing damage. Such damage is *not* covered by the Limited Warranty in the *User Guide* that came with the system.

Chapter 5

Reference

Troubleshooting Tables

Use these tables if you have problems using the system *before* calling the Customer Service Center. Many problems arise from misunderstandings of how the system works, especially when you are just becoming familiar with it. These tables cover many problems, usually with a simple solution for each one. To solve a particular problem, do the following:

1. Review the section in this *Guide* that relates to the problem.
2. If you cannot find a solution, then find the section in the following tables that relates to the problem.
 - Read the *What's Happening* column until you find the problem.
 - Read the information in the *Possible Reason* column.
 - Try each of the suggested solutions in the *What to Do* column.
3. Sometimes resetting the receiver can fix a minor problem. See *Resetting Your Receiver* on 117.
4. For more information, call the Customer Service Center at 1-800-333-DISH (3474), or see www.dishnetwork.com.

Note: Before calling the Customer Service Center, have ready the date of purchase and either your customer account number, the receiver conditional access number, or the receiver model number. Display the *Important System Information* menu to find these numbers (See *Ordering Your Programming* on page 6). Also, write down any error messages that the receiver displays on the television screen.

Reference

On-Screen Messages

This table describes some on-screen messages in the order of their *message numbers*. Find the message number in the upper right corner of the message displayed on your TV screen, and then find the matching number in this table.

Message Number	Possible Reason	What to Do
001	There may be a problem with the multi-dish switch.	Check the coaxial cables and their connections to and from the multi-dish switch. Make sure that all required cables are in place, and check that all cable connections are tight and dry (for outdoor cables). If this does not work, call the Customer Service Center for help.
002	Heavy rain, snow, or cloud cover may be interfering with transmission of the satellite signal, or there may be other interference.	- Note the local weather conditions. Remove any snow or other debris which may have collected on the satellite dish. Make sure that the satellite dish has a clear line of sight to the satellite. Check whether branches or leaves have grown into the line of sight. - Make sure that the satellite dish is aimed at the satellite. Check the strength of the signal using the Point Dish/Signal menu. Consult your installer to re-aim the dish, if necessary, to obtain the strongest possible signal.
003, 004	The wrong type of coaxial cable may be used in the system, or the cable run length may be too long. Or, there may be a problem with the multi-dish switch.	- Make sure the system uses RG6 coaxial cable; if not, call your dealer or installer. - Check the dish-to-receiver cable run length; if it is over 200 feet, call your dealer or installer. - Check the coaxial cables and their connections to and from the multi-dish switch. Make sure that all required cables are in place, and check that all cable connections are tight and dry (for outdoor cables). If this does not work, do the Check Switch test.
005	The receiver may not yet have been authorized via the satellite signal. The satellite dish may have moved so that it is no longer picking up the satellite signal. The cable connections may have loosened or have moisture inside. There may be an interruption of the satellite signal.	- If you have authorized the receiver, wait a few minutes to see if the message is removed. Make sure that all required cables are in place, and check that all cable connections are tight and dry (for outdoor cables). - Make sure that the satellite dish has a clear line of sight to the satellite. Check whether branches or leaves have grown into the line of sight. - Check that the Signal Strength bar in the Point Dish/Signal menu is green and displays the word Locked. If not, contact your installer to re-aim the satellite dish. If you have not authorized the receiver, call the Customer Service Center for help.
006	- The receiver may not be connected to an active telephone line. - The credit limit may have been suspended.	- You <i>must</i> connect the receiver to an active telephone connection at all times. If you install two or more receivers, you <i>must</i> connect <i>each</i> receiver to an active telephone connection at <i>all</i> times. - Call the Customer Service Center for help checking the credit limit, and/or to get authorization to make a purchase.
008	Maybe the receiver is connected to a DSL (Digital Subscriber Line) phone line.	Install a DSL filter between the receiver and the telephone wall jack. You can obtain the filter from your DSL provider.
011, 012	Viewers in specific areas are prohibited from watching certain programs. <i>For example</i>, viewers who live close to a particular football stadium may be prohibited from watching football games that are played in that stadium.	Remember that the program providers specify which programs are “blacked out” for which viewers, <i>not</i> DISH Network™.

Troubleshooting Tables

Message Number	Possible Reason	What to Do
013, 014	You may have tried to tune to a program on a channel which you have not bought.	You <i>must</i> buy a channel <i>before</i> you can tune to a program on that channel. Call the Customer Service Center to buy the channel, or if you believe this message was displayed by mistake.
015	You may have just plugged in the receiver, and it is acquiring the satellite signal. Or, the receiver may have temporarily lost the signal.	- Wait a few minutes to see if the message is removed. Make sure that all required cables are in place, and check that all cable connections are tight and dry (for outdoor cables). Make sure that the satellite dish has a clear line of sight to the satellite. Check whether branches or leaves have grown into the line of sight. - Check that the Signal Strength bar in the Point Dish/Signal menu is green and displays the word Locked. If not, contact your installer to re-aim the satellite dish.
018	- The receiver may not be connected to an active telephone line. - The credit limit may have been exceeded.	- You <i>must</i> connect the receiver to an active telephone connection at all times. If you install two or more receivers, you <i>must</i> connect <i>each</i> receiver to an active telephone connection at <i>all</i> times. - Call the Customer Service Center for help checking the credit limit, and/or to get authorization to make a purchase.
022	The satellite dish may have moved so that it is no longer picking up the satellite signal. The cable connections may have loosened or have moisture inside. There may be an interruption of the satellite signal.	- If you have authorized the receiver, wait a few minutes to see if the message is removed. Make sure that all required cables are in place, and check that all cable connections are tight and dry (for outdoor cables). - Make sure that the satellite dish has a clear line of sight to the satellite. Check whether branches or leaves have grown into the line of sight. - Check that the Signal Strength bar in the Point Dish/Signal menu is green and displays the word Locked. If not, contact your installer to re-aim the satellite dish. If you have not authorized the receiver, call the Customer Service Center for help.
026	The receiver may have temporarily lost the satellite signal.	- Wait a few minutes to see if the message is removed. Make sure that all required cables are in place, and check that all cable connections are tight and dry (for outdoor cables). Make sure that the satellite dish has a clear line of sight to the satellite. Check whether branches or leaves have grown into the line of sight. - Check that the Signal Strength bar in the Point Dish/Signal menu is green and displays the word Locked. If not, contact your installer to re-aim the satellite dish.
028	Pay-Per-View events cannot be purchased until the receiver has downloaded new software.	Turn the receiver off via the remote "Power" button and do not disturb for the next 15 minutes. To change channels, press the "Up" or "Down" arrow button on the remote or use the "Recall" button to return to the last viewed channel.
032	You may have tried to set a <i>VCR Event Timer</i> without having set up the receiver to control the VCR.	You <i>must</i> set up the receiver to control the VCR <i>before</i> you can set a <i>VCR Event Timer</i>. See the <i>Using the System</i> for instructions.
059	You may have tried to close an installation menu without having done the Check Switch test.	If your setup includes a multi-dish switch, you <i>must</i> do the Check Switch test.
060	You may have aimed the satellite dish at one satellite, but selected the option for another satellite on the Point Dish/Signal menu.	- Make sure that you have selected the option for the right satellite on the Point Dish/Signal menu. - Make sure that the cable(s) for the satellite you have selected are connected to the LNB that receives signals from that satellite.
061	You may have set up the receiver to accept a transmission (a "download") of the latest operating software via the satellite signal.	It is <i>very</i> important for the receiver to get the latest operating software, so let the receiver do so. The "download" may take several minutes. Do <i>not</i> disturb or unplug the receiver during this time.

Reference

Message Number	Possible Reason	What to Do
074	The receiver gives you three chances to enter the correct password. If you fail to do so, the receiver “times out” and will not allow you to try again for several minutes.	Wait a few minutes and then try again to enter the password. Note: The “time out” feature is designed to prevent someone from trying password after password until he or she happens to guess the right one and so gains unauthorized access to the receiver.
078, 079, 080	- You may not have connected the receiver to an active telephone line. Or, the telephone line may be defective. - Maybe the receiver is connected to a DSL (Digital Subscriber Line) phone line.	- Connect the receiver to an active telephone line. Make sure that the telephone line to which you connect the receiver is working properly. Note: To be able to order Pay-Per-View programs, you <i>must</i> keep the receiver connected to an active telephone line at all times. If your setup includes more than one receiver, this applies to <i>each</i> receiver. The receiver uses the telephone line to make toll-free calls, usually in the middle of the night, to send information to the Customer Service Center. - Install a DSL filter between the receiver and the telephone wall jack.
093	You may have set up the receiver to reset itself back to the “factory defaults,” <i>that is</i>, the settings it had when it was shipped from the factory.	If you want to reset the receiver to its factory default settings, select the Yes option. If not, select the No option.

DISH Pro Twin LNBF

What's Happening	What's Wrong	What You Can Do
When you run Check Switch, you do not see "Twin" identified as a Device or LNBF. All entries show "X"s.	- The DISH Pro Twin LNBF may not be properly connected. - Cables may be too long, over 200 feet. - Cables may not be rated for 2150 MHz. - You may have DISH Pro Adapter installed on a DISH Pro receiver. - May have a non-DISH Pro switch or LNBF or incompatible accessory device* in the system.	- Check all cable connections in your system and run Check Switch again. - Make sure cable length between receiver and DISH Pro Twin does not exceed 200 feet. Rerun check switch. - Make sure cable is rated for 2150 MHz. Rerun check switch. - Remove the DISH Pro Adapter; this device is only for non-DISH Pro receivers. Rerun check switch. - Remove any non-DISH Pro switches/LNBs or incompatible accessory devices* from the system. All LNBs and switches must be DISH Pro. Rerun check switch.
When you run Check Switch, you see "Twin" identified as the Device/LNBF and Satellite shows "Conn" but you do not see "Satellite Reception Verified".	The DISH Pro Twin LNBF is connected but no satellite signal is present.	Check the point dish/signal screen to confirm you have satellite signal. If not, check your dish antenna to ensure the DISH Pro Twin is installed properly, the dish is pointed/peaked on the satellite signal and there is nothing blocking the signal path to the dish. Rerun check switch.
When you run Check Switch, you see "Satellite Reception Verified" but you see "Feed" instead of "Twin" identified as the Device/LNBF.	The DISH Pro Twin is connected but something in the system may be blocking the switch commands.	Check the cable path between the DISH Pro Twin and the receiver and remove any incompatible accessory devices*. Rerun check switch.
When you run Check Switch, you do not see "Twin" identified as a Device or LNBF, but odd transponders are detected only on one satellite.	- You may have DISH Pro Adapter installed on a DISH Pro receiver. - May have a non-DISH Pro switch or LNBF in the system	- Remove the DISH Pro Adapter; this device is only for non-DISH Pro receivers. Rerun check switch. - Remove any non-DISH Pro switches/LNBs from the system. All LNBs and switches must be DISH Pro. Rerun check switch.

What's Happening	What's Wrong	What You Can Do
When you run Check Switch, you see "Twin" identified as the Device/LNBF but you only have signal confirmed from one satellite.	The DISH Pro Twin LNBF is connected but the dish may not be pointed to receive signal from both 110 and 119 satellites.	- If the check switch summary screen shows "119 W" on Dish Input 2, you need to point your dish 9 degrees to the east and repeak your dish. Rerun check switch. - If the check switch summary screen shows "110 W" on Dish Input 1, you need to point your dish 9 degrees to the west and repeak your dish. Rerun check switch. - Make sure skew setting is correct for a Dish 500 installation at your zip code. Rerun check switch.
When you run Check Switch, you see "Twin" identified as a Device or LNBF, but only odd transponders are detected.	Cables may not be rated for 2150 MHz.	Make sure cable is rated for 2150 MHz and all accessory devices are compatible. Rerun check switch.
Getting receiver messages that signal is lost or being acquired	- Check the weather conditions to see if heavy rain or snow could be temporarily block the signal. - Check for any obstructions in way of the dish like new growth on trees	- Wait for weather to clear up and restore signal. - Clear obstructions from the signal path.

* Compatible accessory devices must pass 2150 MHz signals, 22 KHz signals both directions (per DiSEqC 2.0 specifications), and pass DC power.

Using the Remote Control

What Is Happening	Possible Reason	What to Do
You cannot find the remote control.	N/A	Use the receiver front panel Control Buttons to control the receiver until you find the remote. If the remote control is permanently lost or too damaged to use, call the Service Center to order a replacement.
When you press a button on the remote control, the receiver does not do what you expect.	- The remote control may be missing batteries, the batteries may be incorrectly placed in the remote, or the batteries may be weak or dead. - You may be using the wrong remote control (1 or 2) for the menus (TV1 or TV2) you are trying to operate.	- If the batteries are missing or dead, insert fresh AAA-size batteries. If the remote has fresh batteries, check whether they are placed according to the label diagram. If not, remove them and place correctly. - Make sure you are using Remote Control 1 (2) to control TV1 (TV2) menus.
Your UHF Pro remote control does not work well from far away.	You may be experiencing interference from objects near your receiver antenna.	- Make sure the UHF antenna is connected to the receiver and not touching anything else. - Vary the tilt angle of the receiver's UHF antenna. Locate the UHF antenna tip away from other electronics equipment or metal surfaces, even if separated by wooden shelving. - Move the receiver to different locations. For best results, place the receiver as high as possible, above all other equipment in your entertainment center. - Place the UHF antenna outside the entertainment center by using a coaxial cable to connect it to the receiver.

Reference

What Is Happening	Possible Reason	What to Do
When you press the remote control Power button to turn the receiver ON, the receiver front panel Power light does not light up.	- Other lights are too bright. - Remote control not operating properly or the batteries are weak or dead. The receiver power cord not plugged into a power outlet, or there may be a problem with the power. - The remote control(s) may not be set to the address(es) used by the satellite receiver. - You may be using the wrong remote control (1 or 2) for the menus (TV1 or TV2) you are trying to operate. - If the receiver is in Single Mode, the TV2 indicator will not light.	- Try other remote control buttons to see if the receiver is responding. - Replace the remote batteries with fresh ones. - Check that the receiver power cord is not damaged, and that the plug is inserted correctly into the outlet. - Make sure the remote control(s) are set to the same address(es) used by the satellite receiver. See page 43 for information on changing the remote control address. - Make sure you are using Remote Control 1 (2) to control TV1 (TV2) menus. - This is normal. No action required or switch to Dual Mode.
You use a pyramid type IR extender (not a “mouse tail”), and it does not seem to work.	- The IR sensor on the extender that receives the remote control signals may not be facing the remote control. The IR cable on the extender that sends the signal to the receiver may not be right in front of the IR sensor on the receiver front panel. - You are using Remote Control 2 which does not transmit IR signals.	- Make sure that the extender that receives the signal from the remote control is facing the right way, so that the IR sensor can receive the remote control signals. - Make sure that the IR cable on the extender that sends the signal to the receiver is right in front of the IR sensor on the receiver front panel, so that the receiver IR sensor can receive the signals. - If doing the above does not solve the problem, contact the manufacturer of the extenders for assistance. - Use a pyramid-type IR extender only with Remote Control 1 which uses IR signals. - Install a UHF attenuator.

Hearing A Program

What Is Happening	Possible Reason	What to Do
The receiver front panel TV1 and TV2 lights are on and there is a good picture on the TV set, but you do not hear any sound.	- You may have muted the sound, or set the volume so low that you cannot hear it. - The audio connections may not be properly connected.	- Check the volume level on the TV or audio device. Turn off the mute or turn up the volume, as required. - Check the audio connectors and cables from the receiver to the TV or the sound system. - Check the TV speakers or the sound system.
You hear a foreign language with a program.	You may have set the receiver to an alternate audio language.	Use the Alternate Audio Language menu to select the language that you prefer.

Using the Menus

What Is Happening	Possible Reason	What to Do
You were using a menu, and it suddenly closed.	The receiver has a time-out feature that closes any menu after several minutes of no activity. This will discard any changes you have made, but otherwise does no harm to the receiver.	Start over again.

Watching A Program

What Is Happening	Possible Reason	What to Do
The receiver front panel TV1 and TV2 lights are on, but the TV image: - is black (no picture), - is frozen, - has break-ups, - has "snow," or - shows small squares of various colors.	- The TV set may not be working properly. - If the TV and the receiver are working properly, there may be interference with the satellite signal. The TV may be wired to the wrong input. - The TV may not be on the correct channel. - The TV may not be set to display from the correct input. - Shared View may be disabled preventing picture on TV2.	- Make sure that the TV set is plugged into an electrical outlet. Make sure the outlet has electrical power. - Make sure that the TV is turned on. - If the receiver is connected to the TV using only the CH 3-4 connections, make sure that the TV is tuned to channel 3 or 4 (whichever works best in your area) and that the receiver is set to the same channel as the TV using the Modulator Setup screen. - If the TV is receiving the signal through the in-home cabling system from the CH 21-69 output on the receiver, make sure the TV is tuned to the same channel as indicated in the receiver Modulator Setup screen. - Make sure that the TV brightness and contrast are adjusted correctly. - Make sure that the TV is connected properly to the receiver. Make sure that the TV's text mode and closed captioned features are turned off. - If the TV is connected to the receiver using the RCA-type or S-Video connections, make sure the TV is set up to display from the connected outputs. - Check that the system has been installed correctly. Make sure that all required coaxial cables are in place, and check that all cable connectors are tight and dry (for outdoor cables). Make sure that the satellite dish has a clear line of sight to the satellite. Check whether branches or leaves have grown into the line of sight. - Make sure that the satellite dish is aimed at the satellite. Check the strength of the signal using the Point Dish and Signal Strength menu. Consult your installer to re-aim the dish, if necessary, to obtain the maximum possible signal strength. Note the local weather conditions. Heavy rain, snow, or cloud cover may be interfering with transmission of the satellite signal. Remove any snow or other debris which may have collected on the satellite dish. - Enable Shared View (see page 51).

Reference

What Is Happening	Possible Reason	What to Do
The receiver front panel Power light is on, and there is a picture on the TV screen, but the picture: has sparkles or is grainy, has a herringbone pattern, lacks color or vertical hold, or wobbles, or looks “washed out” or fuzzy.	The TV set may not be working properly. If the receiver is connected to the TV using only the RF or VHF connections, there may be a strong local broadcast on the same channel, or a channel adjacent to the one to which the TV is tuned. There may be interference from other nearby electrical devices (such as cellular telephones, computers, microwave ovens, radios, stereos, or TVs).	Make sure that the TV brightness and contrast are adjusted correctly, and that the TV is working properly. Make sure that the TV is connected properly to the receiver. Check other nearby electrical devices as possible sources of interference. Check that all required coaxial cables are in place. Check for moisture or water leaking into all connections. Dry them out if needed, then seal them with coaxial cable sealant. Check the dish-to-receiver cable run length; if it is over 100 feet, call your dealer or installer.
A “black box” fills almost all of the TV screen.	You may have turned on the Closed Captioned feature on the TV, and put that feature into Text mode.	Using the TV remote control and/or menus displayed by the TV (<i>not</i> the receiver remote control or the menus displayed by the receiver), turn off the closed captioned feature.
The TV screen is all blue.	- You may have connected the receiver to an input on the TV that is incorrect for the signal output from the receiver. - Shared View may be disabled preventing picture on TV2.	- Check your TV owner’s manual for the correct TV input to use for the signal output from the receiver. - Enable Shared View (see page 51).

Using the Program Guide or the Browse Banner

What Is Happening	Possible Reason	What to Do
In the Program Guide , some channels have a red background.	Red means that you have not bought the program. You <i>must</i> buy a channel before you can tune the receiver to it.	If you want to buy a channel, call the Customer Service Center at 1-800-333-DISH (3474).
You try to display future programs in the Program Guide or Browse Banner , but find you cannot.	The Program Guide and Browse Banner can display programs scheduled for an extended, but not unlimited time beyond the present.	- Try displaying the Program Guide again later. By that time, it may show programs for the time and date you want. - Turn the receiver off for about ten minutes. This will allow the Program Guide to be updated.
You try to display programs that have ended in the Program Guide or Browse Banner , but find you cannot.	The Program Guide and Browse Banner can display <i>only</i> programs that have not yet ended. These features <i>cannot</i> display a time earlier than the present.	Contact the program providers for details on past programs.
When you are using the Program Guide or Browse Banner , some channels are missing.	- You may have applied a Favorite List other than the list named All Chan. - You may have set up the locks to hide certain programming. - If your setup includes a multi-dish switch, you may need to do the Check Switch procedure.	- You can change the applied Favorite List while using the Program Guide, by pressing the remote control Guide button repeatedly. You can choose another custom Favorite List, the All Chan list, which includes all of the channels, or the All Sub list, which includes all subscribed channels. - Unlock the receiver for the Program Guide to display hidden channels. - Do the Check Switch procedure (see the installation instructions for details).

Using Locks

What Is Happening	Possible Reason	What to Do
You set a lock (<i>for example</i> , a lock on programs by ratings), but the lock does not take effect.	You may not have locked the receiver.	You <i>must</i> lock the receiver to apply any lock that you have set.
You forgot the password, so that you are unable to unlock the receiver.	You may not have written down the password, to keep it in a safe place.	Call the Customer Service Center. You <i>must</i> provide account information to the Customer Service Representative. If you have set up a PIN, you will need to provide that, as well.

Changing Channels

What Is Happening	Possible Reason	What to Do
You enter a desired channel number. The channel changes, but the new channel is not exactly the channel you entered.	You may have made a mistake entering the channel number, or the channel number you entered may be invalid. If so, the channel displayed is the closest possible to the channel you entered. If you entered the number for a channel that you have not bought, the receiver will change to the channel and allow you to buy the channel or display a message.	Carefully retry entering the channel number you want. Press the remote control RECALL button to return to the previous channel number.
You are scanning up or down through the channels, and the receiver is skipping channels that you know you have bought.	- If a Favorite List other than All Chan is applied, the receiver will skip channels that are not on the applied list. - If you have set up the locks to hide adult channels and the receiver is locked, the receiver will skip such channels.	- Select All Chan as the active Favorite List by pressing the GUIDE button repeatedly. Unlock the receiver so that it does not skip adult channels. - If you want to buy a channel, call the Customer Service Center.

Using Favorites Lists

What Is Happening	Possible Reason	What to Do
You press the remote Guide button while the Program Guide is displayed. You find that you can apply <i>only</i> the All Chan list or the All Sub list.	If you have not added channels to any custom Favorite List, you will be able to apply <i>only</i> the All Chan list or the All Sub list.	You <i>must</i> add channels to a custom Favorite List <i>before</i> you can apply it.
You try to change the All Chan list or the All Sub list. The receiver displays an ERROR message.	The receiver will <i>not</i> allow you to change the All Chan list or the All Sub list.	Choose another list to change. Note: You <i>can</i> only change the All Sub list by changing what channels you buy.

Chapter 5

Reference

You try to apply an empty Favorite List. The receiver displays an ERROR message.	The receiver will not allow you to apply an empty list.	Choose another list to apply, or add at least one channel to the empty list.
A Favorite List does not show channels that you know you have added to it.	If you have set up the locks to hide adult channels and the receiver is locked, the Favorite List will not show such channels.	Unlock the receiver for the list to show adult channels.

Buying a Pay-Per-View Program

What Is Happening	Possible Reason	What to Do
Someone orders a Pay-Per-View program without your permission.	You may have been away from the receiver, and someone else used it.	Lock the purchase of Pay-Per-View programs. <i>Remember that you are responsible for all Pay-Per-View purchases, whether or not you authorize such purchases.</i> If you lock Pay-Per-View purchases, then anyone who wants to order a Pay-Per-View program <i>must</i> enter the password.
You find that you are not able to order a Pay-Per-View program.	- The receiver may not be connected to an active telephone line. - The credit limit may have been exceeded.	- You <i>must</i> connect the receiver to an active telephone connection at all times. If you install two or more receivers, you <i>must</i> connect <i>each</i> receiver to an active telephone connection at <i>all</i> times. - Review your Pay-Per-View purchases to check the credit limit.
You find that you are not able to cancel a Pay-Per-View program.	You ordered a Pay-Per-View program, and then decided not to watch it.	You <i>cannot</i> cancel an order for a Pay-Per-View program, whether it was just ordered or ordered earlier.
Your setup includes more than one receiver. You order a Pay-Per-View program, but it does not appear via all of the receivers.	You ordered a Pay-Per-View program, and want it to be available via all the receivers in your setup.	If you want to watch a Pay-Per-View program on TVs connected to up to six receivers, you must <i>order</i> the program for <i>each</i> receiver but you only <i>pay</i> for the program <i>once</i>.

Renting a DISH On Demand Program

What Is Happening	Possible Reason	What to Do
Your receiver was just installed but you can't see any DISH On Demand Programs.	Your receiver is downloading the DISH On Demand programming.	It will take a minimum of 24 hours after installation of your satellite receiver for DISH On Demand to be available.
You were watching a DISH On Demand program when it suddenly stopped.	You reached the end of your rental.	You can re-rent the program. Check My Play List for the time limit on the DISH On Demand programs you rent.

Using the Telephone for Voice/Data/FAX

What Is Happening	Possible Reason	What to Do
While you are making a telephone call, you hear "clicks."	The receiver may have tried to call the Customer Service Center to send Pay-Per-View purchase information. When the receiver found that the telephone was busy, it automatically disconnected.	You do not have to do anything. You can always use your telephone line, because the receiver automatically hangs up if it finds the line is busy.
The receiver cannot connect to DISH Network.	Maybe the receiver is connected to a DSL (Digital Subscriber Line) phone line.	Install a DSL filter between the receiver and the telephone wall jack.
You pick up the telephone to make a call, but you do not hear a dial tone.	The receiver was calling the Customer Service Center to send Pay-Per-View information. When the receiver found that the telephone was busy, it automatically disconnected.	Hang up, and then pick up the telephone again to get a dial tone.
Your computer or facsimile (FAX) machine tries to send a FAX or modem transmission, but fails.	The receiver was calling the Customer Service Center to send Pay-Per-View information. When the receiver found that the telephone was busy, it automatically disconnected. The FAX or modem found that there was no dial tone, and cancelled the transmission.	Resend the FAX or modem transmission.
Your computer or FAX machine was receiving a FAX or modem transmission, but an error occurred.	The receiver may have tried to call the Customer Service Center to send Pay-Per-View purchase information during the FAX or mode call. When the receiver found that the telephone was busy, it automatically disconnected. This generated "clicks" that caused an error in the FAX or modem transmission.	Have the sender resend the FAX or modem transmission.

Using Event Timers

What Is Happening	Possible Reason	What to Do
You try to set up an event timer and the receiver displays a message noting that the program is locked.	You <i>must</i> enter the password <i>before</i> you can create an event timer for a locked program.	To be able to set up an event timer for the program, first enter the password.
You try to set up an event timer and the receiver displays a message noting that the program is a Pay-Per-View event.	You <i>must</i> order a Pay-Per-View event <i>before</i> you can create an event timer for it.	To be able to set up an event timer for the event, first order it.
You try to set up an event timer, but the receiver displays an Error message giving you the option to delete an event timer that was set up earlier.	You already have set up the maximum number of event timers.	To be able to set up a new event timer, delete one of the event timers you set up earlier.
You set up an event timer, but the receiver does not tune to the channel of the program, or does not record the program.	- You may have set up a <i>Reminder Event Timer</i> but what you should have set up is an <i>Auto-Tune Event Timer</i>. - If you are using Record Plus, it is possible that someone at the other TV may have cancelled the timer when it activated.	- Remember that a <i>Reminder Event Timer</i> just reminds you that the program is about to start. An <i>Auto-Tune Event Timer</i> reminds you and tunes the receiver to the channel of the program. - Make sure you set up Record Plus timers when the other TV is not being used.
You set up an event timer for a program that is repeated (such as a regularly scheduled program), but the timer does not operate for a showing of the program.	You may have set up a timer with an incorrect frequency.	Remember that a <i>Once</i> event timer operates just one time. A <i>Mon.-Fri.</i> event timer operates Monday through Friday on the same channel at the same time. A <i>Daily</i> event timer does the same, Monday through Sunday. A <i>Weekly</i> event timer operates once a week on the same channel at the same time.

Reference

What Is Happening	Possible Reason	What to Do
You set up an event timer, but the timer does not operate at all.	The program time may have changed so that the event timer overlapped another event timer. The program time may have changed by more than twenty-four hours.	If the receiver is ON and finds an event timer overlap, it will display the Event Timer Scheduling Conflict menu. You <i>must</i> edit or delete one of the overlapping event timers. No event timer will operate if the program time changes by more than twenty-four hours.
You set up a <i>Once</i> event timer, but the timer operates at a time different from what you expect.	The program time changed.	A <i>Once</i> event timer always operates at the actual time of the program.
You stop the operation of an event timer for one showing of a program that is repeated (such as a regularly scheduled program), but the timer operates for the next showing.	Stopping the event timer applies <i>only</i> to the current showing of the program.	To stop all operations of a repeated event timer, you <i>must</i> delete the event timer. Note: The receiver deletes a <i>Once</i> event timer when it operates.

Using DVR Features

What's Happening	What's Wrong	What You Can Do
You find you can't watch part of a program you're auto recording.	- If the receiver runs out of room to auto record a program, it starts to erase the oldest part of the program to make room for new audio and video. - When you change the channel, you erase what's stored in auto recording. - You <i>can't</i> watch part of a "live" program that hasn't been broadcast yet, because the receiver hasn't recorded it yet.	- To make sure you can watch all of a program, on-demand record it instead of auto recording it. - If you want to be able to watch all of a program you're auto recording, don't change the channel. You can only auto record for about one hour.
You find the receiver didn't on-demand record a program.	- Maybe you didn't press the remote control RECORD button while you watched the program or set an <i>Event Timer</i> to record it. - Maybe the receiver ran out of room to on-demand record the program. - You may have had a signal outage caused by bad weather during the recording.	- To on-demand record a program, you <i>must</i> either press the remote control RECORD button <i>or</i> set an <i>Event Timer</i>. If you set an <i>Event Timer</i> to record the program, maybe the <i>Event Timer</i> was not set up right. See the <i>Event Timers</i> table for help. - Check the "time Left" on the DishDVR Recorded Events menu. If you "protect" many recorded programs, the receiver may not have enough room to record any new programs.
You find the receiver is missing programs you recorded.	If you don't "protect" a recorded program, and the receiver needs room to record a new program, it may record over that recorded program to have room.	Use the DishDVR Recorded Events menu to "protect" an on-demand recorded program. This means the receiver will ask you before it records over that recorded program. But note, if you "protect" many recorded programs, the receiver may not have enough room to record any new programs.
When you open a recorded program's info menu, some of the options seem to be missing.	You see menu options <i>only</i> when they work. <i>For example</i> , the Start option doesn't show up unless you select a recorded program.	You can use <i>only</i> the options you see on the menu. You won't see all the options at once. You'll never see a "Record" option; to record a program you <i>must either</i> press the remote control RECORD button or set an <i>Event Timer</i> .
On-demand recording stores only one program, or only part of one program.	On-demand recording works by program unless you set a manual event timer to start and stop the recording at the times you set yourself.	To record more than one program, or to record parts of one or more programs, set a manual event timer.

Device Codes

These tables contain the manufacturer codes for programming the remote to control your TV, VCR, DVD player, or audio amplifier. Every attempt has been made to include all codes. If your device brand is not listed or if the codes do not work, the remote may not control your device. In some cases, codes may operate some but not all buttons shown in this guide.

TV Codes

Programming in AUX mode:
Press 0 before entering the TV code.

TV	Codes
A Mark	670
Action	662
Admiral	514, 521, 605, 668, 669, 675
Aiko	727
Aiwa	751
Akai	570, 573, 659, 660,
A-Mark	620
Amtron	657
Anam National	509, 541, 620, 651, 657, 661, 663, 698
AOC	505, 506, 519, 520, 573, 620, 627, 652, 653, 654, 659, 664, 665, 670, 672
Apex	743, 744, 745
Archer	620
Audiovox	620, 657, 662, 672
Bell & Howell	590, 669, 675
Broksonic	752, 659, 661, 748
Capehart	519, 627
Citizen	506, 516, 523, 524, 525, 526, 590, 652, 654, 657, 658, 680, 727
Classic	659
Colortyme	573, 627, 652, 654, 660, 667, 668, 671, 674, 679, 681
Contec/Cony	541, 655, 657, 661, 662, 726
Craig	536, 541, 657, 661, 662, 666, 667, 694
Crown	526, 536, 657, 666, 670
Curtis Mathes	506, 516, 526, 573, 590, 641, 645, 650, 652, 654, 658, 659, 660, 664, 665, 667, 668, 670, 674, 680, 703, 708

TV	Codes
Daewoo	505, 524, 526, 529, 530, 531, 573, 652, 653, 654, 658, 659, 663, 664, 665, 670, 672, 674, 684, 698, 719, 727
Daytron	526, 627, 652, 654, 658, 665, 670, 672
Dimensia	645, 650
DISH Network	722, 742
Dixi	566, 620
Dumont	501, 627, 652
Electrohome	526, 573, 651, 652, 654, 656, 659, 660, 665, 670, 709, 728
Emerson	526, 534, 535, 536, 537, 538, 539, 541, 573, 590, 627, 636, 642, 648, 652, 654, 655, 657, 658, 659, 660, 661, 662, 665, 666, 667, 669, 670, 677, 679, 682, 692, 696, 699, 720
Envision	506, 573, 652, 654, 660, 664
Fisher	542, 590, 683
Fujitsu	534, 682, 694
Funai	534, 541, 657, 661, 662, 677, 682, 694
GE	508, 509, 543, 544, 630, 645, 646, 650, 651, 652, 654, 659, 661, 663, 665, 667, 668, 670, 673, 676, 681, 690, 691, 698, 701, 715, 716, 725, 728, 742
Goldstar	505, 523, 526, 545, 546, 566, 573, 652, 653, 654, 655, 656, 658, 659, 660, 664, 665, 670, 671, 678, 693, 730, 747
Gradiente	660, 671
Granada	627, 670, 671
Grundig	670, 673
Hallmark	627, 652, 654, 659
Harmon/Kardon	561, 659
Hinari	534

TV	Codes
Hitachi	523, 526, 548, 549, 553, 554, 555, 585, 597, 626, 636, 638, 643, 648, 652, 654, 655, 665, 668, 669, 670, 672, 673, 702, 718, 726
Infinity	566, 671
JBL	566, 671
JC Penney	505, 506, 516, 525, 526, 543, 546, 631, 645, 646, 650, 652, 653, 654, 658, 659, 664, 667, 668, 670, 673, 676, 678, 680, 690, 691, 701, 725, 726, 728, 730
Jensen	556, 573, 652, 654, 660
JVC	508, 557, 559, 642, 649, 655, 667, 673, 676, 726, 735, 736, 737
Kawasho	548, 561, 573, 652, 654, 664
Kenwood	506, 573, 652, 654, 656, 659, 660, 664, 679, 681
Kloss Novabeam	657, 663, 698, 723, 724
Konka	753
KTV	526, 539, 541, 573, 657, 658, 661, 662, 664, 665, 670, 696
Lloyds	627, 679
Loewe	566
Logik	675
Luxman	523, 652, 654
LXI	563, 566, 590, 595, 667, 631, 635, 645, 646, 650, 654, 659, 668, 678, 683, 691, 701, 725
Magnasonic	573, 659, 660, 669, 672, 677
Magnavox	506, 520, 525, 536, 566, 567, 568, 573, 610, 652, 654, 656, 659, 660, 664, 665, 666, 669, 671, 673, 674, 677, 723, 724, 729
Majestic	675
Marantz	506, 566, 573, 652, 654, 660, 664, 665, 671, 678, 681
Megatron	627, 654

Chapter 5

Reference

TV	Codes
Memorex	590, 627, 653, 654, 659, 675, 678, 720
MGA	504, 505, 506, 542, 571, 573, 627, 652, 653, 654, 656, 660, 728
Mitsubishi	504, 505, 542, 570, 571, 572, 573, 597, 623, 627, 652, 653, 654, 656, 659, 660, 664, 665, 670, 671, 705, 728
Montgomery Ward	675
Motorola	521, 605, 651
MTC	505, 506, 516, 523, 573, 627, 652, 653, 654, 659, 664, 667, 672, 680
Multitech	657
NAD	502, 617, 627, 631, 635, 637, 654
National	509
NEC	505, 506, 507, 517, 523, 573, 627, 651, 652, 653, 654, 660, 664, 665, 679, 681, 731, 732
Nikkai	612
Nikko	654, 672, 727
Onwa	541, 657, 661
Optimus	637
Optonica	521, 605, 607
Orion	694
Osaki	612
Panasonic	508, 509, 510, 512, 566, 644, 651, 662, 663, 668, 672, 673, 676, 685, 689, 698, 700, 716, 234, 247
Philco	505, 506, 525, 536, 568, 573, 610, 651, 652, 653, 654, 655, 656, 659, 660, 664, 665, 666, 669, 671, 672, 674, 677, 723, 724, 729
Philips	525, 566, 651, 652, 655, 656, 671, 690, 723, 724, 729
Pioneer	502, 548, 576, 636, 637, 648, 652, 654, 663, 665, 681, 708
Portland	505, 526, 573, 652, 654, 658, 659, 664, 665, 670, 727
Price Club	680
Prism	676
Proscan	645, 646, 650, 668, 691, 725, 742
Proton	513, 519, 526, 536, 585, 627, 652, 654, 655, 659, 660, 665, 666, 668, 670, 678

TV	Codes
Quasar	508, 509, 651, 663, 673, 676, 698, 700, 747
Radio Shack/Realistic	526, 541, 590, 607, 612, 645, 650, 652, 654, 655, 657, 658, 661, 662, 663, 668, 670, 683, 698, 730
RCA	503, 505, 548, 586, 630, 633, 634, 636, 641, 645, 646, 648, 650, 651, 652, 653, 654, 656, 661, 663, 665, 667, 668, 670, 681, 691, 698, 701, 708, 715, 716, 725, 742, 749
Runco	501
Sampo	506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746
Samsung	505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738
Sansui	754
Sanyo	542, 590, 652, 683
SBR	566
Schneider	566
Scott	526, 534, 537, 541, 600, 652, 654, 655, 657, 661, 662, 665, 670, 677, 682, 696, 701
Sears	523, 534, 542, 563, 590, 595, 601, 604, 617, 627, 631, 635, 645, 646, 650, 652, 654, 656, 659, 661, 668, 670, 682, 683, 688, 691, 703, 725, 726
Sharp	521, 526, 585, 605, 607, 628, 629, 652, 654, 655, 658, 669, 670, 674, 679, 739, 740, 741
Signature	675
Solavox	612
Sony	500, 578, 640, 670, 690
Soundesign	525, 536, 541, 627, 652, 654, 657, 659, 661, 665, 666, 682
Starlite	657
Supra	523
Sylvania	506, 525, 536, 566, 568, 569, 573, 600, 610, 652, 654, 656, 659, 660, 664, 665, 666, 671, 672, 674, 677, 723, 724, 729, 733
Symphonic	632, 657, 662, 677, 692, 694
Tandy	521, 605

TV	Codes
Tatung	509, 651, 663, 698
Technics	508, 673, 676
Techwood	523, 573, 652, 654, 660, 676
Teknika	504, 505, 512, 516, 523, 524, 525, 526, 534, 536, 541, 573, 644, 652, 653, 654, 655, 657, 658, 661, 662, 664, 665, 666, 670, 672, 675, 680, 681, 682, 685, 726, 727
Telefunken	679
Toshiba	516, 590, 617, 631, 635, 667, 678, 680, 683, 688, 750
Totevision	526, 658, 668
Ultra	672
Universal	543, 690
Vector, Research	506
Video Concepts	570, 661
Wards	536, 573, 607, 645, 650, 652, 653, 654, 656, 659, 664, 665, 666, 667, 668, 669, 674, 675, 677, 678, 682, 690, 715, 723, 724, 729
White, Westinghouse	659, 664, 670, 672, 674
Yamaha	505, 506, 573, 652, 653, 654, 656, 664, 666, 672, 679

VCR Codes

Programming in AUX mode:
Press 1 before entering the VCR code.

VCR	CODES
Aiwa	588, 622, 623
Akai	513, 514, 515, 516, 517, 518, 520, 568, 682
Alba	546
Amstrad	588
ASA	556
Audiovox	676
Bell & Howell	581
Broksonic	559, 748
Bush	589
Calix	676
Canon	554, 678, 679
Capehart	546
CCE	681
Citizen	534, 591, 592, 594, 675, 676, 677, 684

VCR	CODES
Colortyme	592,
Craig	591, 658, 675, 676, 681, 685, 687, 688
Curtis Mathes	554, 592, 594, 605, 607, 675, 677, 678, 679, 683, 684
Daewoo	506, 534, 546, 547, 559, 588, 684
Daytron	546
Denon	686
Dimensia	607
Dumont	549
Electrohome	512, 676, 687
Emerson	505, 506, 508, 509, 511, 512, 534, 559, 568, 588, 590, 618, 676, 678, 684, 687
Finlandia	549
Finlux	549, 556, 588
Fisher	548, 549, 581, 584, 588, 608, 610, 684, 688
Fuji	678
Funai	588
Garrard	588
GE	550, 551, 552, 554, 572, 591, 605, 607, 675, 678, 679
Go Video	557, 558, 620, 685
Goldstar	592, 594, 676, 687, 747
Goodmans	585, 589
Gradiente	588, 687
Granada	549, 581
Grundig	556
Harmon/Kardon	568, 592
Harwood	681
Hinari	589
Hitachi	536, 538, 539, 540, 588, 595, 597, 680, 682, 686
ITT	518
JC Penney	554, 581, 591, 592, 594, 595, 600, 674, 675, 676, 678, 679, 680, 681, 685, 686, 687
Jensen	595, 680, 682
JVC	561, 562, 563, 581, 592, 594, 600, 674, 682, 686
Kenwood	562, 581, 592, 594, 600, 674, 677, 682, 683
KLH	681
Kodak	676, 678
Lloyds	683, 688
Logik	589, 681, 685
Luxor	518
LXI	676

VCR	CODES
Magnasonic	685, 687
Magnavox	527, 533, 554, 556, 678, 679, 684, 685
Marantz	554, 556, 581, 585, 592, 594, 600, 602, 674, 677, 678, 683
Matsushita	678
Memorex	507, 533, 549, 554, 566, 581, 585, 588, 608, 675, 676, 678, 686, 687, 688
MGA	512, 567, 568
Minolta	595, 680, 686
Mitsubishi	512, 562, 567, 568, 570, 571, 595, 680, 687
Motorola	678
MTC	544, 588, 675, 685
Multitech	579, 588, 675, 677, 681
NAD	573
NEC	562, 581, 592, 594, 600, 602, 674, 677, 682, 683
Nikko	676
Noblex	675
Olympus	678
Optimus	676, 687
Optonica	585
Orion	506, 684, 687
Panasonic	523, 554, 598, 614, 628, 633, 678, 679, 684, 685, 688, 747
Pentax	592, 595, 677, 680, 683, 686
Pentex Research	594
Perdio	588
Philco	554, 678, 679, 686
Philips	554, 556, 585, 678, 684
Pioneer	562, 573, 574, 575, 576, 600, 674, 680,
Portland	546, 677
Proscan	605, 607,
Proton	685
Quasar	554, 678, 679, 747,
Radio Shack	512, 607, 608, 610, 687
Radio Shack/Realistic	581, 584, 588, 608, 675, 676, 678, 679
Radix	676
RCA	518, 525, 527, 528, 591, 595, 605, 607, 615, 631, 649, 675, 678, 680, 686
Realistic	534, 549, 554, 581, 584, 585, 588, 608, 675, 678, 679, 687, 688
Ricoh	502
Runco	533

VCR	CODES
Saisho	506
Salora	567, 581
Samsung	515, 517, 534, 579, 591, 675
Sansui	544, 562, 600, 674, 682, 685
Sanyo	549, 581, 582, 583, 608, 675, 688
SBR	556
Schneider	589
Scott	508, 534, 559, 590, 684, 687
Sears	548, 549, 581, 584, 595, 608, 610, 676, 678, 680, 683, 684, 686, 687, 688
Sentra	546
Sharp	512, 585, 607, 625
Shintom	589, 595, 681, 685
Singer	678, 681, 685
Sony	500, 501, 502, 504
STS	678
Sylvania	554, 556, 567, 588, 678, 679
Symphonic	588, 594, 683, 688
Tandy	581, 588
Tashiko	588, 676
Tatung	594, 682,
Teac	588, 594, 682
Technics	554, 633, 678,
Teknika	554, 588, 676, 678, 687
Toshiba	534, 535, 567, 584, 590, 680, 684, 688
Totevision	591, 675, 676, 687
Unitech	675,
Vector Research	534, 592, 600, 674, 677, 683
Video Concepts	534, 568, 592, 600, 674, 677, 683,
Wards	534, 588, 595, 608, 675, 676, 678, 680, 681, 684, 687, 688
XR-1000	588, 678, 681
Yamaha	581, 592, 594, 600, 674, 682, 683
Zenith	500, 501, 533, 747

Chapter 5

Reference

TV/VCR Combo

Programming for combination devices: Program the remote control in TV mode and then in VCR mode.

TV/VCR	Codes
Broksonic	748
Goldstar	747
Panasonic	747
Quasar	747
Zenith	747

DVD Player Codes

Programming in AUX mode: Press 1 before entering the DVD code.

DVD Players	Codes
Aiwa	634, 694, 751
Alpine	653
Apex	654, 655, 743, 744
Broksonic	656, 752
Clarion,	696
Classic	695
Daewoo	657
Denon	697, 698, 699, 700
Emerson	658, 701
Fisher	659
Funai	658
GE	702, 703
Go Video	692, 693
GPX	704
Hitachi	632, 635, 660, 705, 706, 707
JVC	636, 689, 708, 711
Konka	637, 638, 753
Koss	745
Magnavox	626, 661
Memorex	709

DVD Players	Codes
Mintek	710
Mitsubishi	629
NAD	701
Norcent	762
Onkyo	713
Oritron	723
Panasonic	639, 662, 663, 714, 715, 716, 717, 734
Philips	640, 641
Pioneer	665, 718, 719
Proscan	720
Qwestar	721, 723
RCA	627, 650, 666, 690, 742, 749
Sampo	724
Samsung	651, 652, 667, 668, 691, 740, 741
Sansui	725, 754
Sanyo	643, 726
Sharp	669, 727, 746
Sherwood	728
Sony	617, 644, 645, 670, 671, 729, 730, 731
Sylvania	658
Teac	732
Technics	733
Techwood	664
Toshiba	616, 646, 647, 672, 735, 736, 750,
Yamaha	737, 738, 739
Zenith	648, 673

Tuner/Amplifier Codes

Programming in AUX mode: Press 2 before entering the tuner/amplifier code.

Tuner/Amplifier	Codes
Aiwa	636, 641, 656, 687, 718, 720, 724, 775, 726

Tuner/Amplifier	Codes
Carver	653
Citizen	709
Curtis Mathes	734
Denon	647, 674
Fisher	653, 741
GE	711
Goldstar	677, 690
Harmon/Kardon	640, 672, 751
Hitachi	717, 754
JBL	640
JVC	637, 683, 703, 725
Kenwood	649, 676, 691, 726, 728, 745
Luxman	752
Magnavox	654, 705, 740
Marantz	651, 740, 742, 743
NAD	739
Nakamichi	671, 748, 750
NEC	716, 739
Onkyo	642, 660, 662, 678
Optimus	648, 664, 734, 744, 749
Panasonic	643, 644, 652, 742, 746
Pioneer	658, 667, 668, 679, 702, 734
Proton	654, 705
Quasar	652, 742, 746
Radio Shack	744
RCA	635, 638, 704, 727
Sansui	753
Sanyo	741
Sharp	712, 713, 714, 715, 749
Sherwood	646, 670, 736, 738, 744
Sony	639, 645, 650, 687, 728, 729, 730
Teac	684, 737

Tuner/Amplifier	Codes
Technics	643, 644, 652, 742, 746
Toshiba	710
Yamaha	663, 730, 731, 732, 733, 745, 747

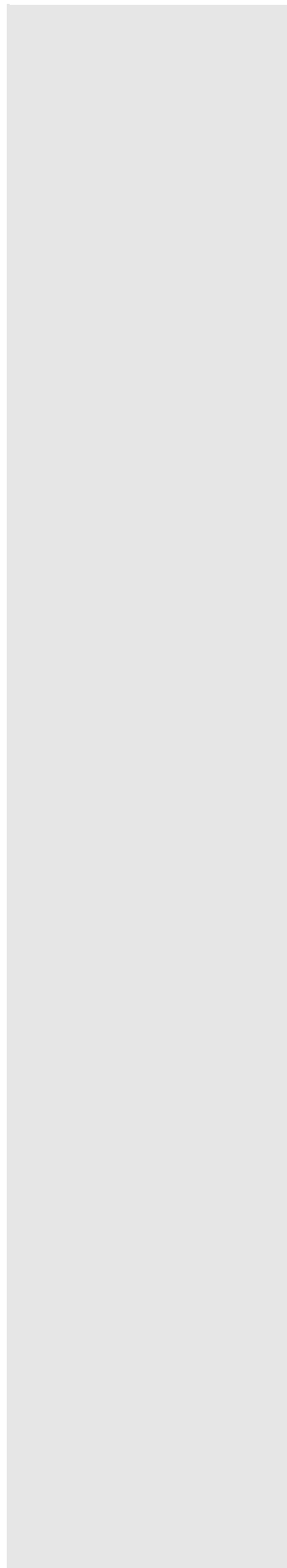
DVD/VCR Combo

DVD/VCR	Codes
Go Video	692,693
JVC	689
RCA	690
Samsung	667,691

TV/DVD Combo Codes**Programming for combination devices:**

Program the remote control in TV mode and then in VCR (or AUX - press 1 before entering the DVD code) mode.

TV/DVD	Codes
Aiwa	751
Broksonic	752
Konka	753
Panasonic	734
RCA	749
Sansui	754
Toshiba	750



Appendix

Limited Warranty



This Limited Warranty is a legal document. Keep it in a safe place. Remember to retain your Bill of Sale for warranty service! Any items returned without a copy of the Proof of Purchase will be considered out of warranty.

What the Warranty Covers

This warranty extends only to the original user of the equipment and is limited to the purchase price of each part. EchoStar Technologies Corporation and its affiliated companies ("EchoStar") warrant this system against defects in materials or workmanship as follows:

- **Labor:** For a period of one (1) year from the original date of purchase, if EchoStar determines that the equipment is defective subject to the limitations of this warranty, it will be replaced at no charge for labor. EchoStar warrants any such work done against defects in materials or workmanship for the remaining portion of the original warranty period.
- **Parts:** For a period of one (1) year from the original date of purchase, EchoStar will supply, at no charge, new or re-manufactured parts in exchange for parts determined to be defective subject to the limitations of this warranty. EchoStar warrants any such replacement parts against defects in materials or workmanship for the remaining part of the original warranty period.

Note: "Parts" means items included in this package, which may include the satellite dish assembly, receiver, LNBF, remote control, or dish mounting hardware. It does not include other parts purchased separately.

What the Warranty Does Not Cover

- This warranty does not cover installation of the system. If applicable, such installation will be warranted under a separate installation agreement.
- This warranty does not cover consumer instruction, physical setup or adjustment of any consumer electronic devices, remote control batteries, signal reception problems, loss of use of the system, or unused programming charges due to system malfunction.
- This warranty does not cover cosmetic damage, damage due to lightning, electrical or telephone line surges, battery leakage, fire, flood, or other acts of Nature, accident, misuse, abuse, repair or alteration by other than authorized factory service, use of accessories not recommended by the receiver manufacturer, negligence, commercial or institutional use, or improper or neglected maintenance.
- This warranty does not cover equipment sold AS IS or WITH ALL FAULTS, shipping and handling, removal or reinstallation, shipping damage if the equipment was not packed and shipped in the manner prescribed, nor equipment purchased, serviced, or operated outside the continental United States of America.

Legal Limitations

REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. ECHOSTAR SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS SYSTEM, NOR FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF, OR INABILITY TO USE, THIS SYSTEM. UNDER NO CIRCUMSTANCES SHALL ECHOSTAR'S LIABILITY, IF ANY, EXCEED THE PURCHASE PRICE PAID FOR THIS SYSTEM. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS SYSTEM IS LIMITED IN DURATION TO THE PERIOD OF THIS WARRANTY. ECHOSTAR RESERVES THE RIGHT TO REFUSE TO HONOR THIS WARRANTY IF ECHOSTAR DETERMINES ANY OF THE ABOVE EXCEPTIONS TO HAVE CAUSED THIS SYSTEM NOT TO HAVE PERFORMED PROPERLY. THIS WARRANTY SHALL BE VOID IF ANY FACTORY-APPLIED IDENTIFICATION MARK, INCLUDING BUT NOT LIMITED TO SERIAL OR CONDITIONAL ACCESS NUMBERS, HAS BEEN ALTERED OR REMOVED. THIS WARRANTY SHALL ALSO BE VOID IF THE RECEIVER HAS BEEN OPENED BY AN UNAUTHORIZED PERSON.

If You Need Assistance

1. Call the Customer Service Center at 1-800-333-DISH (3474). Have the date of purchase and either your customer account number, the receiver conditional access number, or the receiver model number ready. Display the Important System Information menu to find these numbers.
2. A Customer Service Representative will assist you.
3. If the Representative determines you should return any equipment, you will be directed to call a Return Authorization representative. Before shipping any equipment, you must talk to a Return Authorization representative and must obtain a Return Authorization (RA) number.
4. You will be given the appropriate address for which to return your equipment. Whether under warranty or not, you will be responsible for the cost of shipping back the defective equipment. For faster service, see the Advance Exchange Program below.
5. Returned equipment must be packaged properly, using either the original shipping materials or the packaging in which the replacement equipment is shipped. Include a copy of the Bill of Sale. Any items returned without a copy of the Proof of Purchase will be considered out of warranty. Follow the instructions given to you by the Customer Service Representative.
6. Write the RA number in large, clearly visible characters on the outside of the shipping box that you use to return the equipment. To avoid confusion and misunderstandings, shipments without an RA number clearly visible on the outside of the box will be returned to you at your expense.

Advance Exchange Program

The Advance Exchange Program allows you to have replacement equipment shipped immediately to you (depending upon where you live, it could take three to five business days). Along with replacement equipment, you will receive a prepaid shipping label and instructions on how to return the defective equipment.

The shipping charge, for receiving replacement equipment and returning the defective equipment, is a one-time fee based on EchoStar's competitive bulk shipping rates (additional charges may apply outside of the continental US). This fee will be charged to your billing account or your valid credit card.

If you do not ship the defective equipment to EchoStar within ten days after receiving the replacement, your billing account or credit card will be charged the market price of the replacement. If you return the defective equipment after ten days, you will receive a full refund less an administrative fee.

If your equipment is out of warranty and can be repaired your billing account or credit card will be charged the standard repair fee for the replacement. If damage to the defective equipment is found, which EchoStar in its sole discretion determines has voided the warranty, or makes the equipment unrepairable, billing account or credit card will be charged the market price of the replacement.

Post Receipt Exchange Program

You may choose to ship the equipment to us at your cost. To provide faster service, upon receipt of your equipment you will be shipped a replacement. Your original equipment will not be available for return.

The equipment you return will be checked to verify whether it is covered under this warranty. If the defective equipment is covered under this warranty, it will be replaced and shipped back to you at no additional cost (additional charges may apply outside of the continental US).

If your equipment is out of warranty and can be repaired your billing account or credit card will be charged the standard repair fee for the replacement. If damage to the defective equipment is found, which EchoStar in its sole discretion determines has voided the warranty, or makes the equipment unrepairable, your billing account or credit card will be charged the market price of the replacement.

Accessory Warranty

An accessory is any DISH Network branded equipment, displaying the DISH Network logo, excluding the receiver, cables and hookups, and non-mechanical components. A one-year warranty becomes effective upon the activation of the DISH system or date of purchase, if bought separately. A proof of purchase is required to verify the purchase date. If an accessory has an expired warranty, no exchange will be issued. You may purchase replacement accessories from DISH Network or your local retailer.

Residential Customer Agreement

THIS RESIDENTIAL CUSTOMER AGREEMENT IS EFFECTIVE UNTIL REPLACED. THIS DOCUMENT DESCRIBES THE TERMS AND CONDITIONS UNDER WHICH DISH NETWORK WILL PROVIDE ITS SERVICE TO YOU. IF YOU DO NOT ACCEPT THESE TERMS AND CONDITIONS, PLEASE NOTIFY US IMMEDIATELY AND WE WILL CANCEL YOUR SERVICE. IF YOU ARE A NEW DISH NETWORK CUSTOMER, YOUR ACTIVATION OF A DISH NETWORK ACCOUNT AND RECEIPT OF DISH NETWORK SERVICES SHALL CONSTITUTE YOUR ACCEPTANCE OF THIS AGREEMENT AND ITS TERMS AND CONDITIONS WILL BE LEGALLY BINDING UPON YOU.

IF YOU ARE AN EXISTING DISH NETWORK CUSTOMER, YOUR CONTINUED RECEIPT OF DISH NETWORK SERVICES FOLLOWING RECEIPT OR PUBLICATION BY DISH NETWORK ON ITS WEB SITE OF THIS AGREEMENT SHALL CONSTITUTE YOUR ACCEPTANCE OF ITS TERMS AND CONDITIONS, AND, ACCORDINGLY, THEY WILL BE LEGALLY BINDING ON YOU.

Thank you for choosing DISH Network for your television service provider.

DISH Network is happy to answer any questions you may have and to provide you with technical and other customer support through the following toll-free number and email address

1-800-333-DISH (3474)
feedback@echostar.com

or you may write to:

DISH Network
Customer Service Center
P.O. Box 33577
Northglenn, CO 80233

and, for general knowledge, try our website at **www.dishnetwork.com**.

"DISH Network" is a trademark of EchoStar Satellite L.L.C.

1. THE DISH NETWORK SERVICE

A. **Services Defined.** DISH Network offers a wide variety of video and audio programming and other services and we are constantly striving to add new services to our lineup. For purposes of this Agreement the term "Services" shall mean the programming available on DISH Network (whether subscription based or pay per view based) and any other services that we may provide to consumers either now or in the future. For purposes of this Agreement the terms "You" or "Your" refer to you, the DISH Network subscriber.

B. **Programming Changes.** Except as otherwise set forth in this Agreement, you may change your programming selection at any time by notifying us. A fee may apply to such changes (Change of Service Fee). In addition, you may be charged a fee (Service Access Fee) if you fail to subscribe to one of DISH Network's basic programming packages which include America's Top 60, America's Top 120, America's Top 180, DISH Latino or DISH Latino Max.

C. **Programming Availability.** Certain Services transmitted by us, including but not limited to some subscription Services, sporting events and broadcast network Services, may be blacked out in your area of reception. If you circumvent or attempt to circumvent any of these blackouts, you may be subject to legal action. You must be at least 18 years of age, or the applicable age of majority where you reside, in order to receive adult-oriented programming services.

D. **Ordering Pay Per View.** You may order DISH Network pay-per-view Services by using your on-screen Program Guide and remote control unit to select the movies and other events we offer. To order DISH Network pay-per-view Services, your DISH Network DBS digital receiver must be connected to a telephone outlet. You may also order DISH Network special events and pay-per-view Services over the telephone by calling the Customer Service Center or by using our automated system through the following toll-free number:

1-877-DISH-PPV (347-4778) for ordering movies

A fee will apply for use of the automated system (Pay-Per-View Automated Fee) or the Customer Service Center (Pay-Per-View Fee).

E. **Private Viewing.** DISH Network provides Services to you for your private home viewing, use and enjoyment. You agree that the Services provided will not be viewed outside of your private residence. You are permitted to exhibit the Services solely in your private residence and not in any other areas. The Services may not be rebroadcast, transmitted, recorded or performed, nor may admission be charged for listening to or viewing any Services provided by us. If we later determine that you utilized your DISH Network Equipment (including any additional DISH Network receivers) or sold, leased or otherwise gave possession of the same to a third party who you knew or reasonably should have known intended to use it to permit the

viewing of the Services in a commercial establishment or any other area open to the public, we may terminate the Services and in addition to all other applicable fees, you agree to pay us the difference between the price actually paid for the Services and the full commercial rate for such Services, regardless of whether we have or had the commercial rights to distribute such Services in a commercial establishment. The payment of that amount and/or the termination of Services shall not prejudice our ability to exercise any other rights and remedies we may have under this Agreement, at law, in equity, or otherwise.

F. Additional Receivers. DISH Network will allow you to place up to five additional receivers on your account. Each additional receiver would be authorized to receive the same Services as your initial receiver. Unless your receiver is rented from DISH Network in which case a monthly rental fee will apply, DISH Network will charge you a monthly Additional Outlet Programming Access Fee for each additional receiver added to your account. This option is only available if your initial DISH Network receiver and all additional receiver(s) are located at the same residence and are continuously connected to the same telephone line. If you desire to receive Services at two different locations, you must open a separate account for each location. You agree that you will not directly or indirectly use a single account for the purpose of authorizing Services for multiple DISH Network receivers that are not all located in the same residence and connected to the same phone line. If we later determine that you did, we may terminate your Services and, in addition to all other applicable fees, you agree to pay us the difference between the amounts actually received by us and the full retail price for the Services authorized for each DISH Network DBS receiver on the account, whether owned by you or not. The payment of that amount and/or the termination of Services shall be in addition to any other rights and remedies we may have under this Agreement, at law, in equity, or otherwise.

G. Changes in Services offered. DISH Network reserves the right to change the Services that we offer, and our prices or fees related to such Services at any time. If the change affects you, we will provide you notice of the change and its effective date. The notice may be provided on your billing statement or by other communication permitted under Section 9B. In the event of a change in the contents of any programming, programming packages or other Services, you understand and agree that we have no obligation to replace or supplement the programming, programming packages or other Services previously offered that have been deleted, rearranged or otherwise changed. You further understand and agree you will not be entitled to any refund because of a change in the contents of any programming, programming packages, or other Services previously offered.

H. Multi-Month Subscriptions. For multi-month subscriptions, you may downgrade the Services only at the time of renewal. You may not downgrade the Services during the term of the multi-month subscription.

I. Fees for Receivers that Independently Support Multiple Televisions. Additional fees may apply for a receiver which supports independent viewing of programming on multiple televisions.

2. BILLING POLICIES AND PAYMENTS FOR SERVICES

A. You agree to pay all amounts billed for Services and to pay all taxes, fees and other charges, if any, which are now or may in the future be assessed on the Services you receive from us. Unless you prepay for a multi-month subscription to Services, we will bill you each month, in advance, for Services ordered by you or anyone who uses your DISH Network Equipment, whether with or without your permission, until you cancel the Services. The bills you receive will show the total amount due, the payment due date, payments, credits, purchases and other charges to your account.

B. You agree to pay us in full monthly by the payment due date for the Services and for any other charges due us, including any fees set forth in this Section 2. Payment of your bill after the due date will result in you paying us a Late Payment Fee. Other fees and charges may also be assessed. If partial payments are made, they will be applied first to the oldest outstanding bill. If you send checks or money orders marked "payment in full," we can accept them without losing any of our rights to collect any other amounts owed by you, notwithstanding your characterization of the payment. DISH Network does not extend credit to our customers, and the Late Payment Fee is not interest, a credit service charge or a finance charge. You understand and agree that in the case of late payment or nonpayment for any Services ordered by you or for any of the charges stated below, we may report such late payment or nonpayment to credit reporting agencies. If you do not pay your bill by the due date, we have the right to disconnect your Services at any time thereafter, in our sole discretion. DISH Network may require you to pay all past due charges, a Reconnect Fee, a deposit equal to a minimum of one month's advance charges and all outstanding balances accrued through the date of deactivation, before we reconnect your Services. Deposits will not be held segregated from other funds and shall not earn or accrue interest.

C. If you at any time fail, neglect, or refuse to make timely payments hereunder, or if a petition in bankruptcy shall be filed on your behalf or against you, or if you take advantage of any insolvency law or become insolvent or make an assignment for the benefit of creditors, or if a receiver, liquidator, or trustee is appointed for your property or affairs, we shall be wholly relieved from our obligations hereunder.

D. If you paid for an annual or other multi-month subscription to any Services and your account is past due for any amounts owed to us, at our option we may suspend any or all Service until payment is received, and/or convert your annual or other multi-month subscription to a monthly subscription. If we convert your multi-month subscription to a monthly subscription, we will first apply the amount you paid for your multi-month subscription to any past due amounts and then any remaining amounts to future obligations. If we elect to offset the amount paid for the remaining portion of a multi-month subscription against amounts past due, you agree to pay, in addition to all other applicable fees, the Offset Fee set forth below for each month and partial month that the multi-month subscription was previously received.

E. If we use a collection agency or attorney to collect money you owe us or to assert any other right which we may have against you, you agree to pay the reasonable costs of collection or other action. These costs might include, but are not limited to, the costs of a collection agency, reasonable attorney's fees and court costs. If there are billing errors or other requests for credit, you can contact our Customer Service Center by telephone or in writing. You must contact us within sixty (60) days of the time you receive the billing statement for which you are seeking corrections. Failure to timely notify us of a dispute shall constitute acceptance of the bill. Undisputed portions of the billing statement must be paid before the next billing statement is issued to avoid an administrative fee for late payment. All payments for Services must be made directly by you to us. DISH Network shall have no obligation to provide Services for which payment is made by you to a third party.

F. In addition to the amounts due for Services, you agree to pay the fees referenced below ("Fees") when applicable. DISH Network reserves the right to increase these Fees or add additional Fees in the future, in our sole discretion:

Smart Card Replacement Fee	\$50.00
Additional Outlet Programming Access Fee (monthly, per receiver)	\$4.99
Late Payment Fee	\$5.00
Change of Service Fee	\$5.00
Duplicate Billing Statement Fee	\$2.00
Overnight Delivery Fee	\$18.00
Restart Fee	\$25.00
Returned Payment Fee	\$25.00
Service Access Fee (monthly)	\$5.00
Offset Fee	\$2.00
Ledger Request Fee	\$5.00
Pay-Per-View Automated Fee	\$1.00
Pay-Per-View Fee	\$5.00

3. CANCELLATION OF SERVICE

A. Your Service will continue until cancelled as provided for herein. Your subscription will be automatically renewed unless you contact us to cancel as provided for in the next paragraph.

B. You have the right to cancel your Service for any reason at any time by notifying us via telephone or in writing at the phone number or address set forth on page 1, above. Please be aware that certain promotional offers have a minimum subscription commitment (usually 12 months) and if you cancel your service prior to the expiration of that commitment, certain early termination fees may apply.

C. DISH Network has the right to terminate your Services at any time without providing notice to you if: (i) you fail to pay your bill when it is due; (ii) we receive confirmation that you have received the Services, or any part of the Services without paying for them; or (iii) you otherwise violate the terms of this Agreement.

D. If your Service is cancelled for any reason, you are still responsible for payment of all outstanding balances accrued, including any applicable Fees.

E. You understand that charges for Services, once charged to your account, are nonrefundable. For monthly subscriptions, the cancellation will be effective at the end of the period covered by the last monthly bill. No refunds or credits will be provided in connection with the cancellation of monthly subscriptions. For annual or other multi-month subscriptions, the cancellation will be effective as of the date the multi-month subscription expires. Because you are receiving a discounted price in exchange for your agreement to pay for your services on an annual or other multi-month basis, in the event you cancel the Services prior to expiration of your multi-month subscription, you understand and agree that you are not entitled to any refund or credit for the unused portions of the multi-month subscription and that we have the right to retain any prepaid monies as liquidated damages.

4. EQUIPMENT

A. In order to receive the Services it will be necessary for you to purchase or lease certain reception equipment consisting primarily of a DISH Network compatible satellite receiver, and remote control ("Equipment"). You may also be provided with a conditional access card ("Smart Card") that is inserted into your satellite receiver. The Smart Card remains the property of EchoStar Satellite L.L.C. Any tampering or other unauthorized modification to the Smart Card is strictly prohibited and may result in, and subject you to, legal action. You agree to return the Smart Card to us upon request.

B. Smart Cards are nontransferable. Your Smart Card will only work in the DISH Network receiver to which it was assigned by DISH Network. If you report to the Customer Service Center that your Smart Card was lost, damaged, defective or stolen we will replace it, as long as there is no evidence of unauthorized tampering or modification. A replacement fee will apply. In addition, in order to minimize downtime for your Equipment, DISH Network will, upon your request, deliver a replacement Smart Card to you via overnight delivery. Our Overnight Delivery Fee will apply.

C. DISH Network reserves the right to alter software in your DISH Network receiver, and provide content to DVR products, through periodic downloads. DISH Network will use commercially reasonable efforts to schedule these downloads to minimize interference with or interruption to your Service.

D. Your DISH Network receiver contains certain components and software which are proprietary to DISH Network. You agree that you will not try to reverse-engineer, decompile or disassemble any software or hardware contained within your receiver or our Smart Card. Such actions are strictly prohibited and may result in the termination of your Services and/or legal action.

E. For proper operation of your Equipment, DISH Network requires that you connect each DISH Network receiver on your account to a telephone line. For accounts containing multiple receivers, each receiver must be connected to the same telephone line. Failure to comply with this requirement may result in interruption of service.

F. If your DISH Network Equipment is stolen or otherwise removed from your premises without your authorization, you must notify our Customer Service Center immediately, but in any event not more than three (3) business days after such removal to avoid liability for payment for unauthorized use of the DISH Network Equipment. You will not be liable for unauthorized use after we have received your timely notification.

5. LEASED EQUIPMENT

A. If you decide to lease your Equipment from DISH Network, the terms and conditions of the lease agreement shall apply, in addition to the terms and conditions of this Agreement. Such Equipment shall at all times remain the sole and exclusive property of DISH Network and we will have the right, at our discretion, to replace it with new or reconditioned equipment and to remove, or require the return of, the equipment upon termination of Services. None of the equipment shall be deemed fixtures or part of your realty. Our ownership of the equipment may be displayed by notice contained on the equipment. You shall have no right to pledge, sell, mortgage, give away or remove, relocate, alter or tamper with the equipment (or any notice of our ownership thereon) at any time. Any reinstallation, return of or change in location of the equipment shall be performed by us at the service rates in effect at the time of service. You shall not attach any electrical or other devices to or otherwise alter the equipment without our prior written consent. DISH Network shall have the right to make such filings as are necessary to evidence our ownership rights in the equipment, and you agree to execute any and all documents as are necessary for us to make such filings. Upon termination of Services, you must notify our Customer Service Center to schedule the return the Equipment.

B. You shall notify us promptly of any defect in, damage to, or accident involving the equipment. All maintenance and repair of the equipment shall be performed by us or our designees. DISH Network may charge you for any repairs that are necessitated by any damage to, or misuse of, the Equipment.

6. TRANSFER OF ACCOUNT, SERVICES OR EQUIPMENT

DISH Network may sell, assign or transfer your account to a third party without notice to you. You may not assign or transfer your Services without our written consent which will not be unreasonably withheld. We may, however, refuse to allow you to assign or transfer your Services if you lease your Equipment or if your account has an outstanding balance.

7. LIMITATION OF OUR LIABILITY

A. WE WILL NOT BE LIABLE FOR ANY INTERRUPTIONS IN SERVICE OR LIABLE FOR ANY DELAY OR FAILURE TO PERFORM, IF SUCH DELAY OR NONPERFORMANCE ARISES IN CONNECTION WITH THE TERMINATION OF ALL OR A PORTION OF THE SERVICES, THE RELOCATION OF ALL OR A PORTION OF THE SERVICES TO DIFFERENT SATELLITE(S), A CHANGE IN THE FEATURES AVAILABLE WITH YOUR DISH NETWORK DBS EQUIPMENT OR ANY ACTS OF GOD, FIRES, EARTHQUAKES, FLOODS, POWER OR TECHNICAL FAILURE, ACTS OF ANY GOVERNMENTAL BODY OR ANY OTHER CAUSE BEYOND OUR CONTROL. WE WILL NOT BE LIABLE FOR ANY DAMAGE RESULTING FROM LOSS OF RECORDED MATERIAL OR THE PREVENTION OF RECORDING DUE TO ANY FAULT, FAILURE, DEFICIENCY OR DEFECT IN SERVICES OR EQUIPMENT. WE MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, REGARDING THE DISH NETWORK DBS EQUIPMENT OR ANY

SERVICES FURNISHED TO YOU. ALL SUCH WARRANTIES ARE EXPRESSLY EXCLUDED. IN NO EVENT SHALL WE HAVE ANY LIABILITY FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES RELATING TO THE DBS EQUIPMENT OR RESULTING FROM OUR FURNISHING OR FAILURE TO FURNISH ANY SERVICES OR EQUIPMENT TO YOU, OR FROM ANY FAULT, FAILURE, DEFICIENCY OR DEFECT IN SERVICES OR EQUIPMENT FURNISHED TO YOU.

B. It is your responsibility to impose any restrictions on viewing by you, other members of your household, or guests, and we shall have no liability to anyone due to or based on the content of any of the Services furnished to you.

8. WARNING AGAINST PIRACY

It is a violation of several U.S. federal and state laws to receive any Services, or any portion of such Services, without paying for them. The penalties for violating such laws can range from imprisonment to civil damage awards of up to \$110,000 per violation.

9. MISCELLANEOUS

A. Physical Address/Change of Address. When setting up your DISH Network account, you agree to provide us with the physical street address where the Equipment will be located. A post office box does not constitute a physical address and is not sufficient to meet this requirement. You agree to give us prompt notice of your change of name, mailing address, physical address where the Equipment is located or telephone number. You may do this by notifying our Customer Service Center by telephone or in writing.

B. Notice. If we send you notice, it will be considered given when deposited in the U.S. Mail, addressed to you at your billing address or hand-delivered to you. Our notice to you will also be effective if provided on your billing statement or by telephone. If you give notice to us, it will be deemed given when received by us at the address listed on the first page of this Agreement.

C. Applicable Law. This Agreement, including all matters relating to its validity, construction, performance and enforcement, shall be governed by applicable federal law, the rules and regulations of the Federal Communications Commission, and the laws and regulations of the state and local area where Service is provided. These terms and conditions are subject to amendment, modification or termination if required by such regulations or laws. If any provision in this Agreement is declared to be illegal or in conflict with any law or regulation, that provision may be deleted or modified, without affecting the validity of the other provision.

D. Other. This Agreement is in addition to any other written agreement between You and DISH Network, including without limitation an installation agreement, lease agreement or promotional agreement. Any and all prior oral or written representations or agreements are superseded by this Agreement and such other written agreements. No salesperson, installer, customer service representative, authorized retailer, or other similarly situated individual is authorized to change the terms and conditions set forth herein. DISH Network may, however, change the terms and conditions of this Agreement in the future and will notify you if that occurs. The terms of this Agreement, which either are expressly stated to survive or by their nature would logically be expected to survive termination, shall continue thereafter until fully performed.

Staying Legal

Title 47, Section 605(e)4, United States Code (U.S.C.) makes it a federal crime to modify this receiver to enable it to receive encrypted (scrambled) television programming without payment of required subscriptions. Conviction can result in a fine of up to \$500,000 and imprisonment for five years, or both. Any owner of this receiver who procures or willfully causes its modification is an accessory to that offense and may be punishable in the same manner. Investigative authority for violations lies with the Federal Bureau of Investigation (FBI).

This product may incorporate copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of such copyright protection technology must be authorized by Macrovision, and is intended for home and other limited pay-per-view uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

U.S. Patent No's 4631603, 4577216, 4819098 are licensed for limited pay per view only.

FCC Compliance



The following text is extracted from Federal Communications Commission (FCC) regulations, as of the publication date of this *Guide*. Contact the FCC (see following) or your library for the complete text of the regulations.

Telephone Communication

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the back panel of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact DISH Network at 1-800-333-DISH (3474). If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

There are no user serviceable parts inside.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

Compliance Information Statement

EchoStar Technologies Corporation, 94 Inverness Terrace East, Englewood CO., (303) 706-4000, declares that:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Signal Strength Present at the Television

The attenuator provided with the satellite receiver will limit the signal present at your television set to below the FCC signal strength limit of 75.6dBuV. If you choose not to install the provided attenuator, you must ensure that the signal strength present at the TV set does not exceed 75.6dBuV.

Connecting to an Off-Air Antenna

In order to receive local broadcast channels, you may wish to install an off-air antenna into your TV distribution equipment. When installing the off-air antenna, you must be careful to meet certain FCC regulations.

There are many devices that allow you to connect your antenna to your in-home distribution system such as splitters, and amplifiers. The FCC requires that the isolation between the antenna port and the network port of your system meet the following:

- 80dB from 54 MHz to 216 MHz, at least
- 60dB from 216 MHz to 550 MHz and at least
- 55dB from 550 MHz to 806 MHz

Measuring the isolation of a device requires specialized equipment. In most cases, it is easier to purchase a splitter or amplifier with the correctly specified isolation from your local satellite television retailer. The above requirements are extracted from 47CFR15.115. For the complete text please visit WWW.FCC.GOV.

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Receiver Information

Write the following information in the spaces provided below. You may need to provide this information if you call the Service Center. To get the Conditional Access Numbers, display the **Important System Information** menu (see *Ordering Your Program Packages*).

Purchase Location Name:	
Purchase Location Telephone Number:	
Receiver Serial Number:	
Receiver Conditional Access Number	
Smart Card Conditional Access Number:	

Remote Control Settings

	Remote Control 1	Remote Control 2
Remote Control Address (SAT Mode)		
TV Code (TV Mode)		
VCR Code (VCR Mode)		
Auxiliary Code (AUX Mode)		

TV Channel Settings

	TV1 (Channel 3 or 4)	TV2
TV Channel		